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ABSTRACT

The project described in this report was conducted to identify what information about program characteristics was considered most useful by administrators in Florida's community college system in making decisions about program quality and to produce profiles of program characteristics to facilitate the decision-making process. Chapter I contains an introduction to the project, its purposes, rationale, and scope. In Chapter II, literature is reviewed on a decision-oriented model of educational evaluations that served as the basis of the project, on attempts in higher education to address the question of quality, and on other related topics. Chapter III discusses the types of information to be used in quality evaluation decisions and outlines the project's design and methodology. In Chapter IV, the results of a survey of 450 administrators at 24 of Florida's community colleges are presented in sections dealing with respondents' characteristics, results for all respondents, and results by respondents' program area, by administrative area, and by selected institutional and personal characteristics. Chapter V contains a summary of the project and its results and 24 recommendations, including that quality be evaluated by program area rather than by institution. Appendices include classifications used in the data analysis, the questionnaire, and detailed survey results. (HB)

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QUALITY:
A DECISION-MAKING APPROACH

BY
T. AL STEUART/C.B. RATHBURN III

A REPORT OF THE
PROGRAM QUALITY INDICATORS PROJECT
OF THE FLORIDA COMMUNITY/JUNIOR COLLEGE
INTER-INSTITUTIONAL RESEARCH COUNCIL, 1981-82

JUNE, 1982

FLORIDA COMMUNITY/JUNIOR COLLEGE
INTER-INSTITUTIONAL RESEARCH COUNCIL
COLLEGE OF EDUCATION
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GAINESVILLE, FLORIDA 32611

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PREFACE

The Florida Community/Junior College Inter-Institutional Research Council (IRC) is a consortium formed by Florida colleges to facilitate research. Representatives from each member college contributed to research efforts by assisting in the identification of needed research, planning, design and collecting of data from their colleges. The IRC staff, housed in the Institute of Higher Education, University of Florida, provides coordination and technical services.

Many persons across the state contributed to the research effort resulting in this report. Special appreciation is given to the members of the Quality Indicators project committee, including Norris Miner of Seminole Community College, Lester Ruth of Lake-Sumter Community College, Tom Delaino of Santa Fe Community College and Russ Peeples of Edison Community College. These persons provided leadership and technical assistance throughout the entire project. The Council of Presidents of the Florida community college system are acknowledged for their support and endorsement which resulted in the participation of 24 of Florida's 28 public community colleges. The institutional representatives for each of the IRC member colleges for the year 1981-82 provided valuable assistance in the project design as well as serving as the project coordinators for their colleges. These persons are:

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Norris Miner	Seminole Community College
Thomas Ribley	Valencia Community College
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William Law, Jr.	St. Petersburg Junior College
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Special acknowledgement is given to the IRC graduate research associates, T. Al Steuart and C.B. Rathburn, III, who coordinated the project, performed the analysis of the data and wrote this report. Also, special thanks is given to the IRC secretary, Teresa Agrillo, for the many hours of typing and retyping this report.

A summary of the project and of the results is presented in Chapter V for the reader who is interested only in an overview of the project. The complete results are in Chapter IV, the methodology utilized in Chapter III, the supporting literature review in Chapter II and a complete introduction in Chapter I.

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CHAPTER I

INTRODUCTION

Just as equity and access dominated the attention of those involved in higher education during the 60's and 70's, quality has emerged as the premier concern of the 1980's (Finn, 1981). In recent years, waning public confidence in higher education coupled with increased fiscal constraints has placed higher education in a dilemma. The dilemma has produced an emphasis on accountability resulting in a proliferation of evaluation activities related to higher education. A major focus of these evaluation activities has been on the maintenance and improvement of the quality of programs and services offered by higher education institutions within the context of broadening student access in a time of fiscal constraint (Craven, 1980, p. vii).

Efforts to determine the quality of educational programs and services have drawn a great deal of attention from both within the institution and from state level governing bodies (Bowen, 1974; Craven, 1980). Many state government leaders have expressed the opinion that maintaining and improving quality is and will continue to be the leading issue in higher education ("Legislators Stress Quality," 1980). This attitude is reflected in the educational achievement goal recently adopted by the Florida State Board of Education:

> On a statewide average, educational achievement in the state of Florida will equal that of the upper quartile of states within five years, as indicated by commonly accepted criteria of attainment (Florida State Board of Education, 1981).

One of the problems encountered in fulfilling such a commitment is the determination of the "criteria of attainment," i.e., to determine what constitutes quality.

As with the terms equity and access, the term educational quality can mean all things to all people (King, 1981). If used too loosely with little or no definition, it provides little counsel. If defined too closely, it is of limited use for the diverse system of higher education (Finn, 1980, p. 21).

Philosophers to statesmen to scholars have attempted to define the concept of quality. In most instances, the results of their labors are in agreement that quality is a subjective judgment by an individual based, at least in part, on some supporting evidence (Lawrence & Green, 1980, p. 8). Researchers in higher education have noticeably refrained from providing a constitutive definition of educational quality but have, through their research designs and choices of various evaluative criteria, operationally defined the concept. The evaluative criteria include, among others, library resources (Cartter, 1966), quality of students (Astin & Henson, 1977), students' success (Krause & Krause, 1970) and faculty qualifications (Blackburn & Lingenfelter, 1973). Many studies of quality education have utilized numerous evaluative criteria in the determination of their quality rankings, but have still represented a limited view of educational quality. This limited view of quality has "consistently identified 20 to 30 outstanding institutions, leaving them to vie with each other for the highest absolute rank in the hierarchical structure, and virtually ignoring the rest of our colleges and universities" (Lawrence & Green, 1980, p. 1).

The major innovative force in American higher education, the

community college, has continually rated poorly utilizing these traditional means of assessing program quality (Bowen, 1974). Traditionally, subjective evaluations by experts have been used to evaluate the quality of an institution of higher education. The bases of these evaluations have been inextricably tied to the missions and goals of the institutions which continually rate among the highest, and, for the most part, have run in opposition to the missions and goals of the community college (Fotheringham, 1978). For this reason, present definitions of quality have little use for the community college in demonstrating the quality of programs or services they offer to their constantly changing clientele.

Purpose of the Project

> The challenge facing higher education is to maintain and strengthen the quality of its programs...within relatively fixed resource constraints. Effective information decision systems are increasingly critical in enabling higher educational institutions to meet this challenge successfully. (Craven, 1975, p. 125)

The determination of educational quality, regardless of how quality is defined, involves decision-making by program administrators. This decision-making process requires the use of some information about the program or service being evaluated.

Stufflebeam, Foley, Gephart, Guba, Hammond, Merriman and Provus (1971) defined evaluation as "the process of delineating, obtaining, and providing useful information for judging decision alternatives" (p. 4). In this light, the making of quality evaluations about educational programs or services may be viewed as a process involving the identification of what information about a program or service is perceived as most useful to the responsible administrators and presenting the information in a format useful for program quality-evaluation decision-making. Utilizing this reference, quality evaluation is not a determination of

quality; that determination becomes a decision on the part of a responsible individual (Alkin & Fitz-Gibbon, 1973).

Stufflebeam et al. divided the evaluation process into three basic steps: delineating, obtaining and providing. The delineating phase is the primary operational step and involves the identification of the most useful information. Stufflebeam et al. stressed the importance of the input of the potential decision-maker in the determination of pertinent evaluative information. They stated that the determination of useful information "can be obtained by the evaluator only in interaction with his client [decision-maker]" (p. 41). Alkin (1969) maintained a similar view of evaluation and postulated that the process of selecting the appropriate information is the pivotal step in any evaluation process.

The purpose of this project involved the delineation phase of evaluation. The project proposed to identify what information (program characteristics) is considered most useful by administrators in Florida's public community college system in making quality-evaluation decisions about programs or services offered by their colleges. The program characteristics identified as most useful by the decision-makers in the system will form the basis of a multivariate quality-evaluation decision-making information model. Also, the project proposed to identify similarities or differences in the usefulness-ratings of the program characteristics for administrators by the program or service area and administrative area within which they held their positions; by type of institution in which they were employed and by other selected personal or institutional classifications (see Appendix A for a list of these classifications). Through the identification of these similarities and differences, quality-evaluation information profiles can be produced for a

variety of program or institutional settings. These profiles will provide the necessary input for the development of a comprehensive program quality-evaluation decision-making information system.

Rationale

The premise of the project was that a gap existed in the research concerned with the information requirements of administrators in the community college system who make program quality-evaluation decisions. With the rapid growth in the areas of data processing and computerized management information systems, the process by which to deliver the information necessary for program quality-evaluation decision-making is available. The gap lies in the determination of what information is most useful and in what format for various decision-makers for their particular situations. The project was designed to identify the information needs of various decision-makers for making program quality-evaluation decisions and to produce profiles of program characteristics to facilitate the quality-evaluation decision-making process through the organization of timely and relevant information especially suited for today's comprehensive community college.

Scope of the Project

The project was confined to personnel in Florida's public community colleges who had some instructional or student personnel responsibilities and who were classified by their institutions as "Executive, Administrative, and Managerial Personnel" under Part 3 of the "Personnel and Salary Report (SA-1)" in the Community College Management Information System Procedures Manual (Division of Community Colleges, 1980, pp. 10.1-10.2). The data were collected by means of a survey instrument

(questionnaire) and represented the expressed opinions of the administrators surveyed. The results of the project are descriptive of the situation in Florida's public community colleges, although they may be applicable to similar community colleges or community college systems in other parts of the nation.

Several factors limited the project:

1. Since attitudes and perceptions constantly change, the attitudes identified in the project were reflective only of the time period during which the project was conducted.
2. The instrument utilized to gather information for the project was developed for this particular project. A respondent's understanding of the items might have differed from the understanding intended by the researcher, although face validity for the questionnaire was established through a review panel.

Organization of the Report

The project report is organized into five chapters. The first chapter contains an introduction, a statement of the purpose of the project, rationale of the project and scope of the project. The second chapter provides a review of selected related literature, including a discussion of the decision-making model of educational evaluation which was the basis of the approach to quality-evaluation used in the project. The second chapter also includes a discussion of attempts in higher education to address the quality issue. Chapter three begins with a statement of the problem and includes a discussion of the development of the questionnaire and the methodology utilized in the project. Chapter four presents the results of the project. Chapter five contains a summary of the project, a summary of the results and recommendations.

CHAPTER II

REVIEW OF RELATED LITERATURE

In reviewing the literature in this area of quality education, two of the more discussed topics in higher education emerged for consideration: those of educational quality and educational evaluation. This chapter reviews and summarizes attempts to address the issue of quality in higher education. It also includes a discussion of the concept of educational evaluation with special emphasis on the decision-oriented model of evaluation which was the basis for the methodology utilized in this project.

Educational Quality

> Quality...you know what it is, yet you don't know what it is. But that's self-contradictory. But some things <u>are</u> better than others, that is, they have more quality. But when you try to say what the quality is, apart from the things that have it, it all goes <u>poof</u>! There's nothing to talk about. But if you can't say what Quality is, how do you know what it is, or how do you know that it even exists? If no one knows what it is, then for all practical purposes it doesn't exist at all. But for all practical purposes it really <u>does</u> exist. What else are the grades based on? Why else would people pay fortunes for some things and throw others in the trash pile? Obviously some things are better than others...but what's the "betterness?".... So round and round you go, spinning mental wheels and nowhere finding anyplace to get traction. What the hell is Quality? What <u>is</u> it? (Pirsig, 1974, p. 184)

This quote from Pirsig provides an appropriate summary of the attempts to address the issue of quality in higher education. If by no other means, educators intuitively recognize a substantial variance in program and institutional quality among the diverse institutions

that comprise the American system of higher education. Yet studies conducted by different researchers for different reasons in different settings using different methodologies have resulted in a variety of quality attributes providing little assistance in operationally defining quality (Lawrence & Green, 1980).

During a recent Southern Regional Educational Board Symposium, SREB President W.L. Goodwin addressed the problem of defining quality:

> ...a part of our problem in higher eudcation is that too often we have confused quality with prestige.... We need to increase the understanding that quality education is not a monopoly of a few dozen major universities in the nation, but is attainable by all types of higher education institutions. ("Legislators Stress Quality," 1980, p. 3)

Dr. Maxwell King, President of Brevard Community College in Florida, in a recent message to his faculty, made the following comments on educational quality:

> Quality in education is not an absolute. It can only be evaluated in terms of arbitrarily determined standards, and these in turn depend partly on subjectively formulated aims and partly on objective statistical procedures.... Education is quality education to the extent that it meets the needs of the people being served. (King, 1981, p. 1)

These two quotes are representative of the general view of quality in higher education. That view is vague, subjective and broad. On one hand, such a perspective on quality has limited use in that it provides little guidance for educational improvement. On the other hand, it is a perspective which maintains maximum flexibility, which is needed considering the diversity found in higher education today.

This section of the literature review is presented in three parts. The first part reviews the major reputational assessments of graduate programs. These studies have formed the basis of attempts to investigate the quality issue in higher education. The second part provides an

overview of quality assessment at the undergraduate and two-year college level. The final part reviews those studies designed to identify quantifiable indicators of quality.

Graduate Education

Beginning with Cattell (1910) and Hughes (1925) and continuing through the prestigious American Council on Education sponsored studies (Cartter, 1966; Roose & Andersen, 1970), reputational ratings of graduate programs have constituted the basis of attempts to address quality in higher education. The methodology incorporated in a vast majority of these studies involved a peer review, where programs were rated by eminent faculty in the same discipline, as experts, and their ratings reflected the quality of graduate education and research in the system. These studies attempted to identify the outstanding research and teaching institutions by program and have consistently identified 20 to 30 institutions, virtually ignoring the balance of the system (Lawrence & Green, 1980, p. 2).

Using a panel of distinguished scholars from each field, Hughes (1925) conducted the first comprehensive reputational study of graduate programs. At the time of this study, only 65 American universities awarded the doctoral degree. Hughes ranked 38 of these universities in 20 graduate disciplines according to the number of outstanding scholars each employed. During the next decade the number of American universities awarding the doctoral degree had nearly doubled. This prompted a second Hughes study (1934) which ranked 59 universities in 35 disciplines according to the quality of facilities and staff for the preparation of doctoral candidates. The stated purpose of both of the Hughes studies was to educate undergraduate students about various graduate programs. These

studies went well beyond this purpose in establishing procedures for quality ratings including the identification of the nation's leading institutions through numerical ranks based upon the informal opinions of academicians.

For the next 20 years, the Hughes studies were regarded as the status quo. It was not until Keniston's (1957) work that an attempt was made to update or validate the Hughes studies. Using department chairmen selected from the institutional members of the American Association of Universities as raters, Keniston ranked 24 graduate programs based on a combined measure of doctoral program quality and faculty quality. These rankings were subsequently used to produce a rank-ordered list of the top 20 institutions which were compared with Hughes' results.

The major weakness of the Hughes and Keniston studies, according to Cartter (1966), was the geographical and rater biases which were not controlled. Other flaws in these studies noted by Cartter included the failure to distinguish measures of faculty quality from measures of educational quality, the failure to account for the biases of raters toward their alma maters, and the choice of department chairmen as raters. It was Cartter's opinion that the chairmen were not necessarily the most distinguished scholars nor typical of their peers in age, specialization or rank and tended to be more conservative and thus to favor the traditional institutions.

These criticisms were accounted for in Cartter's design of the American Council on Education studies in which great care was taken to assure the representation of various institutions and raters from all geographical areas. Cartter surveyed 106 institutions representing 1,163 graduate programs which resulted in rankings of 29 disciplines. The over

4,000 survey respondents included both senior and junior scholars as well as department chairmen. The respondents were requested to rate each doctoral program in their area of study from an alphabetical list of the institutions on two components: quality of graduate faculty and effectiveness of the doctoral program. To support the representativeness of the raters, the respondents were requested to supply basic biographical information. The leading departments were ranked separately on the basis of the raters' responses on each of the components. In most disciplines the rankings for each component were very similar. Whenever the discipline areas overlapped, Cartter compared his ratings with those of Hughes (1925) and Keniston (1957).

Cartter also compared his ratings with various objective measures. He found that his rankings correlated highly with Bowker's (1964), who used enrollment of graduate award recipients in institutional programs as a criterion. Cartter found a high correlation between his ratings and other institutional measures such as faculty salaries, library resources and publication indices. Cartter used these relationships as a primary point in his argument supporting peer ratings for quality assessment.

Cartter was not willing to aggregate departmental ratings to produce institutional ratings as was done by Hughes and Keniston. It was Cartter's opinion that this was inappropriate for three reasons. First, not every institution considered offered doctorates in every field. Second, it was impossible to assign weights to the various fields. Third, various departments represented various specializations within a field and as such were difficult to weight (Cartter, 1966).

Cartter's study was the premier work to 1966 in the area of quality

assessment in higher educa ion. Realizing that the continuous changes in higher education would result in changes in the rankings of institutions in various fields, Cartter committed himself to do a five year follow-up study. The 1970 American Council on Education sponsored Roose-Andersen study fulfilled this commitment by essentially replicating Cartter's study.

The Roose-Andersen (1970) study, through its omission of the word "quality" from its title, represented a change in the philosophy of quality assessment studies:

> Since it is evident...that the appraisal is of faculty and programs as reflected by their reputations rather than as they partake of specific components of an amorphous attribute called "quality," we have resolved to use as a title simply a description of the book's contents, A Rating of Graduate Programs.... (p. xi)

The Roose-Andersen report presented a range of raters' scores rather than absolute raw departmental scores and spoke in terms of quality ranges instead of specific institutional rankings. Even with this apparent change in philosophy, the results of the Roose-Andersen study were very similar to Cartter's study.

Although both the American Council on Education sponsored studies refrained from and discouraged the aggregation of departmental scores into overall institutional ratings, other researchers (Magoun, 1966; Morgan, Kearney & Regens, 1976; National Science Foundation, 1969; Petrowski, Brown & Duffy, 1973) were quick to report such aggregations. Using the reputational rating procedures refined by the American Council on Education, other researchers produced similar program or institutional rankings based on the two American Council on Education criteria or other similar criteria (Carpenter & Carpenter, 1970; Cartter & Solmon, 1977; Cole & Lipton, 1977; Cox & Catt, 1977; Gregg & Sims, 1972; Margulies &

Blau, 1973; Munson & Nelson, 1977).

Lawrence and Green (1980) gave considerable attention to weaknesses in reputational ratings, the most apparent being their lack of agreement on the meaning of quality. The definition of quality appeared to be dependent upon the discipline, the program area and the individual rater. The lack of agreement on defining quality appeared to make program or institutional comparisons nonsensical. Lawrence and Green expressed the opinion that higher education was far too intricate to rank solely on the basis of one or two dimensions. "To measure them (institutions) all by the same yardstick is to do a disservice not only to the higher education system but also to prospective students and to the public as a whole" (p. 53).

Many of the criticisms ascribed to the reputational rating approach involved several forms of rater bias. The first form was commonly referred to as a "halo effect" in which a rater's opinion of a particular program was based primarily on the prestige of the institution as a whole and not on the particular program in question. The halo effect worked in reverse when a particular department's reputation lagged behind depending upon the institution within which it was located. A second form of rater bias involved the "alumni effect" in which the raters tended to give high scores to their respective alma maters. This effect was compounded by the fact that the largest departments also produced the largest number of raters. A third rater bias reflected an institution's size or age in reputational ratings (Lawrence & Green, 1980, pp. 8-10).

Dolan (1976) criticized the reputational approach because of its tendency to restrict change and innovation through maintenance of the

status quo. Dolan expressed the opinion that subjective ratings of program quality reflected elitist and traditionalist views of higher education which stifled or restricted diversity including experimental programs and multidimensional approaches. Dolan believed that with the increasing consumer awareness in higher education students should be involved in any attempts to rate graduate programs.

One advantage of reputational ratings as a method of assessing institutional quality was that those who should know best about academic quality of a particular program or discipline could be and were often utilized as raters. Another point in support of this methodology was that the process usually produced results with a high degree of face validity in that those programs or institutions that the educated general public considered to be quality were often identified (Webster, 1981).

Blackburn and Lingenfelter (1973) defended the American Council on Education reputational ratings on the following grounds:

> (1) Panel bias has been largely eliminated by the careful selection procedures of the ACE studies; (2) subjectivity cannot be escaped in evaluation no matter what technique is used; (3) professional peers are competent to evaluate scholarly work, the central criterion in reputational studies; and (4) although not a sufficient condition of general excellence, scholarly ability is necessary for a good doctoral program. (p. 25)

Lawrence and Green (1980) summarized their opposition to reputational rankings as follows:

> The unfortunate consequences of this situation are perhaps more attributable to the higher education community's competitiveness, the mass media's lust for sensational headlines, and the American public's obsession with knowing who's at the top, than to any fault of the studies themselves. Despite their repeated cautions against aggregating departmental scores to produce institutional scores and their constant reminders that the ratings represent the subjective judgments of faculty and that they probably reflect prestige rather than quality, scores do get aggregated, institutions do get compared with one another, and high prestige is translated to mean educational excellence.

> As a result, research and scholarly productivity are emphasized to the exclusion of teaching effectiveness, community service, and other possible functions; undergraduate education is denigrated; and the vast number of institutions lower down in the pyramid are treated as mediocrities, whatever their actual strengths and weaknesses. (pp. 15-16)

One other study of graduate education quality more in line with the approach taken in this project was conducted under the sponsorship of the Council of Graduate Schools and the Educational Testing Service (Clark, Hartnett, & Baird, 1976). A sample of 73 departments equally divided among three fields--psychology, chemistry, and history--was surveyed with the purpose of determining ways to assess quality. Four major conclusions resulted from the study. First, timely, relevant and useful information (program characteristics) related to educational quality could be reasonably obtained. Second, approximately 30 program characteristics were identified as especially useful. Third, these program characteristics appeared to be applicable across diverse program areas. Fourth, two clusters of program characteristics were identified: research-oriented and educational experience indicators. The research-oriented indicators included department size, reputation, physical and financial resources, student ability and faculty publications. The educational experience indicators were concerned with the educational process and academic climate, faculty interpersonal relations and alumni ratings of dissertation experiences.

The Clark et al. study used faculty, student and alumni input in a separate peer-rating component of the study similar in approach to the American Council on Education studies. The most interesting finding of this component of the study was that reputational ratings of graduate programs had little relationship to teaching and educational effectiveness

as measured by the input of the students and alumni. Clark et al. concluded that the peer ratings were based primarily on scholarly publications with little or no emphasis on the quality of instruction.

Undergraduate Education

Although considerably fewer studies have been conducted designed to assess quality at the undergraduate level than at the graduate level, those studies rating undergraduate education have demonstrated that colleges differ substantially in the more traditional measures of quality. Jordan (1963), in a study involving 119 undergraduate programs, found that those institutions which spent more on salaries for library staff and had higher numbers of library volumes per student tended to score higher on a quality index based upon multiple weighted factors. Brown's (1967) study of undergraduate education ranked colleges on the basis of eight criteria including total current income per student, proportion of students entering graduate school, proportion of graduate students, number of library volumes per student, total number of fulltime faculty, faculty-student ratio, proportion of faculty with doctorates and average faculty compensation. These two studies represented approaches to undergraduate quality assessment similar to those utilized for graduate programs. Lawrence and Green (1980) expressed the opinion that these and similar studies (Dube, 1974; Krause & Krause, 1970; Tidball & Kistiakowski, 1976) which used quality measures more typically associated with graduate quality assessment (e.g. publication record of students, percent of students who finish professional schools or terminal graduate degrees, etc.) failed in their purpose because they did not take into account the "special nature of the undergraduate experience" (p. 33).

Astin, through a series of studies (1965, 1971; Astin & Henson, 1977) approached one specific aspect of undergraduate quality which he termed the selectivity index. Astin (1971) defined the selectivity index as a relative measure of the academic ability of a college's entering freshmen (pp. 1-2). In the latest study involving the selectivity index, Astin and Henson (1977) used ACT and SAT scores to approximate the selectivity of all accredited two- and four-year institutions. Astin and Henson defended this approach on the basis of its acceptance by the mainstream of faculty and administration in higher education (p. 2). The validity of this approach was supported by its correlations with selected institutional characteristics such as student-faculty ratios (Astin & Solmon, 1979).

In a related study, Astin further developed the selectivity index by examining the preferences of academically talented students for various institutions (Astin & Solmon, 1979). Realizing that this measure was confounded by a number of variables such as institutional popularity and regionalism, Astin and Solmon still maintained that a measure of an institution's drawing power for highly able students was a valid quality measure (p. 49).

In their latest study of undergraduate education quality, Astin and Solmon (Astin & Solmon, 1981; Solmon & Astin, 1981) expanded their view of quality to multiple dimensions. This study utilized faculty members representing seven disciplines from institutions in four states (California, Illinois, New York and North Carolina) who were requested to rate institutions from two lists: a national list and a state list. The state list included those institutions in the rater's state which awarded a minimum of five undergraduate degrees in the rater's field

during 1977. The national list was composed of 100 of the "most visible institutions in the rater's field" (Astin & Solmon, p. 14). Each rater was asked to evaluate each institution from both lists according to six quality criteria including overall quality of undergraduate education, preparation of students for graduate and professional school, preparation of students for employment after college, faculty commitment to undergraduate teaching, scholarly or professional accomplishments of faculty and innovativeness of curriculum and pedagogy (Solmon & Astin, p. 24).

Utilizing a factor analysis of the mean ratings on each of the quality criteria for each of the undergraduate disciplines, Astin and Solmon (1981) concluded that

> these ratings showed that the seven fields form a single "overall quality" dimension. In practical terms, this means that quality differences among fields at a given institution tend to be minimal, and that ratings of one department may suffice as an estimate of the quality in the other departments at the institution. (pp. 14-15)

Considering the limited view of quality expressed in the choice of the six quality criteria used in the study, the conclusion appeared warranted.

Probably the best known studies of undergraduate quality, the Gourman studies (1967, 1977), provided little or no explanation of the procedures used to arrive at the reported ratings. Scores on two sets of variables--strength of the institution's academic departments and quality of non-departmental areas--were averaged to produce an average academic departmental rating and an average non-departmental rating and an overall "Gourman rating" for each institution.

Although the Gourman ratings have been accepted as a measure of undergraduate quality, many of the assumptions in these ratings were

questionable. Gourman assumed that ten years were required following graduation to produce an excellent classroom teacher and thus rated older faculty higher. Gourman gave equal weight to faculty effectiveness, public relations, library, a college's alumni association and the athletic-academic balance as measures of institutional quality. Gourman held a bias toward larger institutions, consistently rating them higher than smaller liberal arts colleges (Webster, 1979). The 1977 version of the Gourman ratings used a different format similar to that of the 1970 Roose-Andersen study. In 1977, Gourman rated 68 undergraduate programs, again providing no information on the procedures used in developing the ratings.

Utilizing approaches such as those discussed previously, other researchers have attempted to address the issue of undergraduate quality (Johnson, 1978; Nichols, 1966; Solmon, 1975). Other, possibly less academic, attempts to evaluate undergraduate quality included the popular college guides (e.g. Hawes Comprehensive Guide to Colleges, 1978). Webster (1981) criticized many of these attempts on the basis of their limited view of the undergraduate experience. Central to this criticism was the lack of emphasis on undergraduate teaching in preparation for the job market and the overriding view of undergraduate programs serving primarily as preparatory periods for graduate study.

Very little research has been conducted in the community/junior college setting in relation to the quality issue. In general, many of the premises underlying traditional views of quality in higher education run in opposition to the basic principles of the community college philosophy. An example of this is the selectivity index (Astin & Solmon, 1979). One of the more quoted studies which addressed the issue of quality in the

community college involved the identification of quality indicators from peer opinions expressed in evaluations of selected junior colleges during accreditation team visits (Walters, 1970). Walters identified 58 specific indicators from a list of 516 recommendations made by visiting accreditation teams to 126 public junior colleges over the period of 1960-1969. Most of the indicators related to college procedures, the efficiency of operations, staffing levels and organizational structure. Walters postulated that the 58 indicators taken collectively described a quality public junior college although only two of them were based on any specific quantitative measures. One other study of educational quality in the two-year college was the Pike study (1963) which involved an analysis of the relationship of current expenditures, enrollment and expenditure per student to certain variables associated with educational quality in junior colleges in Texas.

Quantifiable Approaches to Quality

In recent years, higher education researchers have explored numerous ways of providing objective measures of educational quality. Many of these attempts have involved correlating various objective quantifiable measures with established rankings of institutional quality. These quantifiable measures include, among others, institutional size (Elton & Rose, 1972; Hagstrom, 1971), research productivity (Drew, 1975; Wispe, 1979), publication productivity (Lewis, 1968), amount of money spent (Ousiew & Castetter, 1960) and number of library volumes (Lazarsfield & Thielens, 1958). Many of these "correlates of prestige" (Lawrence & Green, 1980, p. 23) used the popular American Council on Education ratings as their basis for comparison. Cartter (1966), anticipating the

identification of quantifiable quality indicators in his ratings, stated that such indicators "are for the most part 'subjective' measures once removed" (p. 4).

The list of factors which significantly correlated with reputational quality ratings was lengthy. Differentiating between a correlational relationship and causation, Blackburn and Lingenfelter (1973) listed the following items as being positively correlated with the 1966 American Council on Education ratings:

1. Magnitude of the doctoral program....
2. Amount of federal funding for academic research and development.
3. Non-federal current fund income for educational and general purposes.
4. Baccalaureate origins of graduate fellowship recipients....
5. Baccalaureate origins of doctorates.
6. Freshman admissions selectivity.
7. Selection of institutions by recipients of graduate fellowships....
8. Postdoctoral students in science and engineering.
9. Doctoral awards per faculty member.
10. Doctoral awards per graduate student.
11. Ratio of doctorate to baccalaureate awards.
12. Compensation of full professors.
13. The proportion of full professors on a faculty.
14. Higher graduate student/faculty ratios.
15. Departmental size of seven faculty members or more. (p. 11)

Fotheringham (1978) described traditional quality indicators as including context, faculty input, faculty-student interaction and student input. Fotheringham defined context as "the setting for the educational process" (p. 17). The context variables included such things as number of library volumes, administrative policies and physical facilities. Pike (1963), in his study of the relationship between 72 variables associated with educational quality and enrollment, current expenditures and expenditure per student found expenditures to be the most important

measure of context. Banghart, Kraprayoon, & Clewell (1978) identified other context variables including curriculum, administrative practices and amount of external funding.

Meder (1955) defined faculty input as including the instructor's training, skill, ability and morale. Blackburn and Lingenfelter (1973) included degrees, awards, faculty compensation and post-doctoral studies as indicators of faculty input. Other faculty input indicators included research productivity (Hagstrom, 1971), publication productivity (Somut & Tanhaus, 1964) and faculty size (Balderston, 1979). The most difficult measures of faculty input were faculty morale, vigor, cohesion and progressiveness which Balderston (1974) suggested could only be subjectively measured.

Faculty-student interaction has been traditionally defined as the faculty-student ratio (Meder, 1955). This view has been expanded to include the accessibility of the faculty (Roose & Andersen, 1970) as well as the extent and nature of the faculty contact with students (Fotheringham, 1978).

Student input indicators of quality have often been held as the most valuable type of indicator. Student input has been defined as the characteristics of the student at the time of admission (Fotheringham, 1978). Blackburn and Lingenfelter (1973) proposed a more comprehensive definition simply as the students' quality. Many researchers have concluded that not enough has been done to control for variations in student input indicators when measuring various outcome indicators of quality (Richards, 1966; Rock, Centra & Linn, 1969).

Fotheringham (1978) identified three more categories of quality indicators labeling them output, student change and intellectual climate.

Output was described as including both faculty output (publications and other productivity measures) and student output (accomplishments of students following graduation). The variability in the specific measures used to assess these output indicators was reflected in the work of Keller (1969) and Lawrence, Weathersby and Patterson (1970).

The student change or student development indicators attempted to assess the extent of learning that took place during the students' enrollment (Turnball, 1971). Ostar (1973) described this as the value-added concept. It was his opinion that in assessment of the development of a student, in both the cognitive and affective domains, specific attention should be given to both the student's initial abilities and the student's goals (Ostar, 1973). Measures of student change identified by Ostar included post-graduate employment, personal achievements, motivation and achievements in graduate school.

Fotheringham (1978) defined intellectual climate as "an attitude toward learning and scholarship shared by students, faculty and administration" (p. 26). Several researchers have expressed the opinion that campus climate is of primary importance in assessing institutional quality (Astin, 1963; Bayer, 1964; Bowen, 1963). Indicators in this category included both academic attributes, such as faculty concern for scholarship, and non-academic attributes such as residential experience, democratic participation of the students in campus affairs, and counseling or other supplementary services.

Educational Evaluation

During the past decade, evaluation in education has become a topic of enormous scope. It has been the failure of many educators to recognize that evaluation is a process of immense complexity, thus requiring

examination in its broadest perspective (Alkin, 1979). Pyatte (1970) emphasized the importance of evaluators in education looking beyond the immediate problems and contemplating the intricate meanings and legitimate functions that embody evaluation theory.

The dynamics of evaluation compel attention from many vantage points. This section of the literature review is presented in three parts. The initial part introduces the concept of educational evaluation through a discussion of various definitions of educational evaluation. The second part provides a brief review of educational evaluation from a broad perspective with special attention given to contemporary models of educational evaluation. The third part discusses the decision-oriented model of educational evaluation which was the basis for this project's approach to the quality issue.

Toward a Definition of Educational Evaluation

There are numerous definitions of educational evaluation in vogue today. These definitions differ in level of abstraction and often reflect the specific concerns of the people who formulated them. At the basic level, evaluation has been defined as the assessment of merit (Popham, 1975, p. 8). Wolf (1979) found this definition in need of further clarification as to the meaning of the terms "assessment" and "merit."

A more descriptive definition was offered by Cronbach (1963), who defined evaluation as "the collection and use of information to make decisions about an educational program" (p. 539). This definition of evaluation was proposed initially during the curriculum development era of the late fifties. Cronbach's studies suggested various kinds of information that could be examined within the evaluation framework and later

analyzed and used in decision-making designed for course improvement (Wolf, 1979).

Doll (1970) defined educational evaluation as "a broad and continuous effort to inquire into the effects of utilizing educational content and process according to clearly defined goals" (p. 361). In terms of this definition, educational evaluation had to transcend the levels of simple measurement techniques or the primary application of the evaluator's values and beliefs. If evaluation was to be a comprehensive and continuous effort, it had to depend on "a variety of instruments which are used according to carefully ascribed purposes" (Doll, 1970, p. 380).

Beeby proposed an extended definition of evaluation as "the systematic collection and interpretation of evidence, leading, as a part of the process, to a judgment of value with a view to action" (Wolf, 1979, p. 117). Wolf (1979) developed the important elements of the definition. First, the term systematic implied that information needed would be defined with precision and obtained in an organized fashion. The second element, the interpretation of evidence, emphasized the role of critical judgment or consideration in the evaluation process. Wolf stated that this element was often neglected in evaluation activities. The third element of Beeby's definition described by Wolf involved the judgment of value. This required the evaluator to be responsible for making judgments from his evaluative work about the worth of an educational endeavor. The last element, with a view to action, introduced the notion that an evaluative undertaking should be designed deliberately for the sake of future action (pp. 117-124).

Pyatte (1970) emphasized the importance of a rational plan element in the definition of educational evaluation. He stated that "evaluation

is the deliberate act of gathering and processing information according to some rational plan the purpose of which is to render, at some point in time, a judgment about the worth of that on which the information is gathered" (p. 360). According to Pyatte, six elements are included: (1) the agent; (2) the object; (3) the inputs; (4) the plan; (5) the time; and (6) the product.

In defining evaluation, Bloom, Hastings and Madaus (1971) discussed the purpose of educational evaluation as:

1. A method of acquiring and processing the evidence needed to improve the student's learning and the teaching;
2. Including a great variety of evidence beyond the usual final paper and pencil examination;
3. An aid in clarifying the significant goals and objectives of education and as a process for determining the extent to which students are developing in these desired ways;
4. A system of quality control in which it may be determined at each step in the teaching-learning process whether the process is effective or not, and, if not, what changes must be made to ensure its effectiveness before it is too late; and
5. A tool in education practice for ascertaining whether alternative procedures are equally effective or not in achieving a set of educational ends. (p. 8)

The obvious variety in definitions of educational evaluation stemmed from the fact that three different schools of thought have co-existed for over 30 years (Worthen & Sanders, 1973). Stufflebeam et al. (1971) provided an excellent discussion of three basic definitions of educational evaluation from which most others have developed. The first definition was an early one equating evaluation with measurement (p. 10). The second definition involved the determination of the congruence between performance and objectives, especially behavioral objectives (p. 11). The third definition was the process commonly referred to as professional judgment (p. 13).

Many other definitions of educational evaluation have emerged in recent years. The most popular have been those in which evaluation has been viewed as "a process of identifying and collecting information to assist decision-makers in choosing among available decision alternatives" (Worthen & Sanders, 1973, p. 20). An expanded discussion of this definition of educational evaluation is presented in the final part of this section of the literature review.

Contemporary Models of Educational Evaluation

With the increased call for accountability in educational institutions, the body of literature on educational evaluation has expanded rapidly in recent years. Many models of educational evaluation have emerged. There have been numerous attempts to categorize the array of evaluation models, the most comprehensive of which were done by Stufflebeam et al. (1971), Worthen and Sanders (1973), Anderson et al. (1975) and Gardner (1977). The more prominent of these educational evaluation models included the measurement model, the congruence model, the professional judgment model, the goal-free model and the decision-oriented model (Gardner, 1977).

The measurement model of evaluation as described by Gardner equated evaluation with measurement (p. 575). In this model, evaluation was viewed as the science of instrument development and interpretation (p. 576). The use of measurement instruments results in scores on other indices which are mathematically and statistically manipulated so that masses of data can be handled and comparisons done of individual or group scores with established norms (Stufflebeam et al., pp. 10-11). The model has been widely used and is illustrated by the use of SAT and GRE scores. Gardner further described the model as being based on the assumption that

the phenomena to be evaluated have significant measurable attributes and that instruments can be designed which are capable of measuring these attributes.

Perhaps no other theory of evaluation has received more attention in recent evaluation literature, especially in its application for the classroom, than the congruence model. The origin of this model was most closely associated with the work of R.W. Tyler (1950). Tyler stated that educational objectives were essentially defined in terms of expected changes in human behavior. It followed that evaluation was the process for determining the degree to which changes in behavior actually took place. Gardner described this model as

> the process of specifying or identifying goals, objectives or standards of performance; identifying or developing tools to measure performance; and comparing the measurement data collected with the previously identified objectives or standards to determine the degree of discrepancy or congruence which exists. (p. 577)

Probably the most widely used but least discussed model of evaluation is the so called professional judgment model (Stufflebeam et al., p. 3). In this model, evaluation <u>is</u> professional judgment. Values or criteria which form the basis of the judgment may or may not be explicitly stated. Often a commonly shared value system is assumed (Gardner, p. 574). Examples of the uses of this model include the judgments of visiting teams of professionals in the accreditation process and the use of peer review panels for various programs such as faculty committees passing judgment on promotion or tenure (Worthen & Sanders, 1973, pp. 126-127).

The goal-free concept is a recent addition to the body of knowledge on educational evaluation. This model, originally proposed by Scriven

(1972, 1973), argued that if the main objective of evaluation was to assess the worth of outcomes, then no distinction should be made between intended versus unintended outcomes and that an evaluation should be conducted without reference to a program's goals or objectives (Gardner, p. 583). The evaluation was not totally goal-free, but standards for comparison could be chosen from a wider range of possibilities than those which might be prescribed by a program's objectives (p. 584). The final outcome of the evaluation "should be accurate, descriptive, and the interpretative information relative to the most important aspects of the actual performance, effects, and attainments" (p. 585) of the program being evaluated.

Each of the previous models of evaluation are similar in that they include reference to the use of information and some judgment made in relation to this information. The models vary in the emphasis placed on these areas. Gardner discussed the merits and shortcomings of each of these models and proposed that each one had advantages depending upon the specific circumstances in which the evaluation occurred.

A brief guide to selecting an appropriate model, or a combination of models, was given by Gardner. He suggested that in situations where a high degree of objectivity is not required, time is short, a simple evaluation is desired and expert human resources are available, then the professional judgment model might be most appropriate. In situations where high objectivity, reliability and comparability are required, where mathematically manipulative results are desired, where relevant measurable attributes can be identified and valid, reliable instruments can be designed and used, then the measurement approach might be most appropriate. In situations where goals are a primary concern and specific

objectives or criteria of performance can be identified, if valid ways to assess performance can be devised and applied and effects unrelated to stated goals are of little or no importance, then the use of a congruency model might be most appropriate. Finally, in situations where all observable effects are potentially of value and human concerns are highly valued, if a relatively high degree of objectivity is not required and if the situation is highly fluid or lacking well-defined goals or objectives and/or lacking traditional measurement data or instruments, then a goal-free model might be most appropriate (pp. 591-592).

Decision-Oriented Model of Educational Evaluation

Stufflebeam and the Phi Delta Kappa National Study Committee have been credited with the refinement of what Gardner referred to as the decision-oriented model of educational evaluation. In this model "evaluators collect information and communicate this information to someone else" (Alkin & Fitz-Gibbon, 1975, p. 1). The process by which this information is collected is systematic and deliberate, an attempt to obtain an unbiased assessment upon which to base an evaluation (Alkin & Fitz-Gibbon, 1975; Guba, 1975; Stufflebeam, 1969).

In this model the results of evaluation are directed toward those individuals who are "intimately connected with the program being evaluated" (Alkin & Fitz-Gibbon, p. 1) or the administrative decision-makers (Gardner, 1977; Guba, 1975; Stufflebeam, 1974; Stufflebeam et al., 1971). In other words, the role of the evaluator is to collect and present summary information to decision-makers (Alkin & Fitz-Gibbon, p. 5). The decision-oriented model is designed to benefit decision-makers. The evaluators collect and present the information needed by someone

else who determines its worth. "Decision-facilitation evaluators view the final determination of merit as the decision-maker's [individual's] province, not theirs" (Popham, 1975, p. 25).

Alkin (1969) viewed the decision-oriented model as a process consisting of four steps. These steps include determining the areas of concerns for possible decisions, determining the appropriate data, collecting and analyzing the data, and reporting the summary information in a form useful for the decision-makers. These steps were condensed and described by Stufflebeam et al. in their definition of educational evaluation as "the (process) of (delineating), (obtaining), and (providing)(useful)(information) for (judging)(decision alternatives)" (p. 40). This statement contained eight elements, set off by parentheses, each of which had significant implications for the process and techniques of evaluation. They were defined as follows:

1. Process. A particular and continuing activity subsuming many methods and involving a number of steps and operations.
2. Decision alternatives. Two or more different actions that might be taken in response to some situation requiring altered action.
3. Information. Descriptive or interpretive data about entities (tangible or intangible) and their relationships, in terms of some purpose.
4. Delineating. Identifying evaluative information required through an inventory of the decision alternatives to be weighed and the criteria to be applied in weighing them.
5. Obtaining. Making information available through such processes as collecting, organizing, and analyzing and through such formal means as measurement, data processing, and statistical analysis.
6. Providing. Fitting information together into systems or subsystems that best serve the purposes of the evaluation, and reporting the information to the decision-maker.
7. Useful. Satisfying the scientific, practical and prudential criteria of Chapter I [internal validity, external validity, reliability, objectivity, relevance, importance, scope, credibility, timeliness,

pervasiveness, efficiency] and pertaining to the judgmental criteria to be employed in choosing among the decision alternatives.

8. Judging. The act of choosing among the several decision alternatives; the act of decision-making. (Stufflebeam et al., 1971, pp. 40-43)

Stufflebeam et al. contended that evaluation was an extension of the decision-making process. In this process, the evaluator assisted the decision-maker during each step of the decision process. The evaluator assisted the decision-maker by helping to delineate the information which was needed, by providing that information and by assisting the decision-maker in the interpretation of the information. Each of these tasks was performed in conjunction with each step of the decision-making process (awareness, design, choice and action) for all types of decision questions (planning, structuring, implementing and recycling) in different decision settings (homeostatic, incremental, metamorphic and neomobilistic)(pp. 49-103).

Utilizing this orientation, Stufflebeam et al. developed what is commonly referred to as the Context-Input-Process-Product (CIPP) model of educational evaluation. The model discriminated between the different settings in which decisions are made. In homeostatic settings, decisions involved the maintenance of internal balance in an educational setting. Decisions that denoted developmental activity which has as its purpose the continuous improvement of a program occurred in incremental settings. Neomobilistic settings were characterized by large innovative efforts to solve significant problems. Finally, the metamorphic decision-making setting was represented by "utopian activity intended to produce complete changes in an educational system based upon full knowledge of how to effect the desired changes" (Worthen & Sanders, 1973, pp. 131-132).

The CIPP model, in addition to identifying the four decision settings, also distinguished four classes of educational decisions, each of which was serviced by a particular type of evaluation. The four classes of decisions were planning decisions for determining objectives, structuring decisions for designing procedures, implementing decisions for utilizing, controlling, and refining procedures, and recycling decisions for judging and reacting to attainments (Stufflebeam et al., 1971, pp. 80-84). Corresponding to these four classes of decisions were four types of evaluations--context, input, process and product--which provided the acronym for this model (p. 218).

In the CIPP model, context evaluation assists decision-makers in the determination of objectives of a program (Gardner, p. 581). It defines the relevant environment of the program, describes the desired and actual conditions pertaining to that environment, identifies unmet needs and unused opportunities and diagnoses the problems that prevent needs from being met and opportunities from being used (Stufflebeam et al., p. 218). Input evaluation provides information for determining how to utilize resources to meet program goals (p. 222). Process evaluation performs the service of providing periodic feedback to persons responsible for implementing plans and procedures (p. 229). This is formative evaluation as defined by Scriven (in Alkin and Fitz-Gibbon, 1975, p. 3). Product evaluation serves the purpose of providing information for assessing and interpreting program objectives whether at the end of a program cycle or at intermediate points relating to decisions to continue, modify, terminate or repeat certain program activities (Gardner, p. 581). In design, the result of the CIPP model was a continuous flow of systematically collected, timely and relevant information

for decision-makers who have the responsibility of interpreting the information provided (Gardner, p. 582). In contrast, Alkin and Fitz-Gibbon (1975) suggested that it was the information itself, from a well-designed evaluation, that would "pass judgment" (p. 5), not a person.

In general terms, Stufflebeam (1969) viewed evaluation as the science of providing information for decision-making. The assumption was made that the ultimate goal of the decision-making process was educational improvement. Educational improvement implied changes resulting from choices selected by decision-makers from various alternatives. The process of decision-making or choosing among options was firmly rooted in the decision-maker's and organization's value system. In this framework, valid and reliable information was necessary to facilitate the decision-maker's judgment of the degree to which various options measured up against a personal or organizational value system (Stufflebeam et al., p. 38).

Stufflebeam (1968) summarized the rationale for the model in the following statements:

1. The quality of programs depends upon the quality of decisions in and about the programs.
2. The quality of decisions depends upon decision-maker's abilities to identify the alternatives which comprise decision situations and to make sound judgments about these alternatives.
3. Making sound judgments requires timely access to valid and reliable information pertaining to the alternatives.
4. The availability of such information requires systematic means to provide it.
5. The processes necessary for providing this information for decision-making collectively comprise the concept of evaluation. (p. 6)

The University of California at Los Angeles Center for the Study of Evaluation (CSE) under the direction of Marvin Alkin developed a model

of evaluation similar to the CIPP model. The CSE model defined evaluation as the process

> of ascertaining the decision areas of concern, selecting appropriate information, and collecting and analyzing information in order to report summary data useful to decision-makers in selecting alternatives. (Gardner, p. 580)

The CSE model is similar to the CIPP model except that the former reconceptualized what Stufflebeam referred to as process evaluation (Popham, 1975). The CSE approach differentiated among the kinds of decisions that are made at five identified stages:

1. Needs Assessment: The initial stage focuses on the provision of information regarding the extent to which educational programs are meeting their objectives.
2. Program Planning: This stage provides information regarding the sorts of instructional programs that meet the predetermined needs.
3. Implementation Evaluation: The third stage provides information on the degree to which the instructional program is actually being carried out in accordance with the program plan.
4. Progress Evaluation: This stage provides information regarding the extent to which the planned program is achieving its objectives.
5. Outcome Evaluation: This stage emphasizes the provision of information regarding the general worth of the program as reflected by the outcomes it produces. (Popham, 1975, p. 38)

An important feature of the CSE model has been that its proponents have developed a wide range of instructional materials and other resources to familiarize educators to this approach. Thus, the CSE model has influenced actual evaluation practice as much as any of the previous models presented (Popham, 1975).

Provus (1971) developed an approach to evaluation in which the discrepancies between established standards and actual performance were closely observed. Provus described his evaluation model as including

five stages: design, installation, process, product and cost. He asserted that "on the basis of the comparisons made at each stage, discrepancy information is provided to the program staff, giving them a rational basis on which to make adjustments in their program" (p. 46).

The influence of the decision-oriented models of educational evaluation provided some of the impetus for the recent development of management information or decision information systems in higher education. Craven (1975) described a decision information system as "any method that provides the right decision-maker with the right information in the right form at the right time so as to facilitate the decision-making process in pursuit of organizational and/or personal goals and objectives" (p. 127). Craven went on to say:

> information--if it is to be useful--must be relevant, intelligible, and timely...(and) every effort should be made at the outset to secure the full support and participation of top level decision-makers in order to ensure an appropriate analysis of decision-making activities and resulting information requirements. (pp. 127-132)

Craven expressed the opinion that "the process by which information requirements are identified and defined is, perhaps, the most important phase of information system development" (p. 132). Craven summarized his case for decision information systems with the following statement:

> Information that responds to those decision-making needs in a valid, reliable, and timely manner will assist higher educational institutions during this period in making decisions that will maintain and strengthen the quality of its programs and faculty and that will enable them to meet the future educational needs of students, society and scholarship. (p. 138)

In summary, the decision-oriented model of evaluation involves "a continual exchange between evaluators and administrators regarding information needs...and a continuous flow of systematically collected,

timely, and relevant information to satisfy those needs" (Gardner, 1977, p. 582). During this process, the evaluator should maintain continual communication with the appropriate administrator regarding what information is needed and in what format for each decision.

Summary

In this chapter selected related literature in the areas of quality assessment and educational evaluation has been reviewed. Lawrence and Green (1980) summarized higher education's attempts to assess quality as subjective attempts to identify the best institutions. Whether or not these attempts were based on peer review or the utilization of a traditionally-based set of quantifiable indicators (which generally correlate highly with each other and with peer reviews), they simply ignored a vast majority of the nation's institutions of higher education. These ratings provided little or no impetus for improvement in higher education, especially for the community college segment, by continuing to reinforce the traditional hierarchy of quality institutions.

The attempts to define educational quality have been both subjective and vague. Although various research methodologies have operationally defined quality as number of library books per student, number of faculty with Ph.D., etc., conceptually quality has been viewed as an individual's value judgment. Hence, the use of the peer rating approach. In essence, educational quality has been viewed as an individuals's value judgment of an institution or program and not a measurable attribute or characteristic.

In the process of arriving at that value judgment, evaluation takes place. Numerous definitions or models of educational evaluation have emerged. With the increased emphasis on management information systems

and the resulting availability of timely and relevant information, the decision-oriented models of educational evaluation have recently received increased support. In this approach, evaluation is viewed as the process of identifying and providing useful information for decision-making. The type of information necessary for evaluative decision-making is a function of the decision setting, the particular decision, and, most importantly, the opinions of the decision-maker. In this approach, the evaluator facilitates the identification of useful information and provides this information in a format most useful to the decision-maker. The decision-maker makes the value judgment based upon this information.

The approach to the educational quality issue utilized in this project was based upon the decision-oriented model of educational evaluation. In this project, quality was viewed as an individual's judgment of a program or service offered by an institution. The project identified what information was considered most useful in making a particular decision: the judgment of quality.

CHAPTER III

METHODS AND PROCEDURES

The Problem

The problem in this project was to determine the degree of usefulness of various types of information (program characteristics) as perceived by administrators in Florida's public community colleges in making quality-evaluation decisions about programs or services offered by their colleges. An ancillary purpose was to identify similarities or differences in the perceived mean usefulness-ratings of the program characteristics for administrators according to various classifications including:

1. The program or service area with which the responding administrator was primarily associated.
2. The administrative areas within which the responding administrators held their positions.
3. Personal characteristics of respondents including degree level, sex, years in present position, years at present college, years in community college education and years in education other than community college education.
4. General characteristics of the institution within which the administrators were employed including the market region of the state where the institution was located, whether or not the institution was designated by the state as an area vocational education school, the total size of the institution in terms of FTE served, the percent of total college FTE served in the

Advanced and Professional Program Area, the percent of total college FTE served in the Occupational Program Area, the percent of total college FTE served in the Developmental Program Area and the percent of the total college FTE served in the Community Instructional Services Program Area.

5. Opinions of respondents related to amount of time spent in, extent of involvement in, or level of experience in program quality-evaluation decision-making. Also the opinions of respondents as to their perception of the degree to which their position is associated with each of the program areas.

A description of these classifications can be found in Appendix A.

The following sections describe the design of the project, the development of the project questionnaire, the survey population, collection of the data and analysis of the data.

Design of the Project

This project was designed to assess the perceptions of community college administrators of the usefulness of various program characteristics for program quality-evaluation decision-making. The review of related literature on the decision-making model of educational evaluation indicated that the determination of what type of information to be used in educational decision-making should be the responsibility of the decision-maker, not the evaluator (Stufflebeam et al., 1971; Alkin, 1969; Craven, 1975). Therefore, a survey research design was adopted for this project and a questionnaire was developed to measure administrators' perceptions of the usefulness of various program characteristics for program quality-evaluation decision-making for programs or services offered by their colleges. This research design was very similar to the design used by the

Educational Testing Service to assess quality in doctoral education programs (Clark et al., 1976). This questionnaire was organized to collect data in four areas:

1. Demographic data of respondents. These data included the respondent's name, position, college, years in present position, years at present college, years in community college education, years in education other than community college education, age, sex and highest degree held.
2. The program perspective respondents used in rating the usefulness of the program characteristics. The perspectives were general (no specific program area in mind), advanced and professional, occupational, developmental, community instructional services, student support services and other.
3. Usefulness-ratings of the program characteristics for program quality-evaluation decision-making.
4. Opinions of respondents of the amount of time spent in program-quality-evaluation activities, the extent of their involvement in program quality-evaluation decision-making, their perceived level of experience in program quality-evaluation and the degree to which their position was associated with each program area.

Development of the Project Questionnaire

In making program quality-evaluation decisions, administrators may desire information related to many aspects or characteristics of a program. The questionnaire designed and used in this project contained a list of 434 program characteristics for respondents to rate for degree of usefulness in making program quality-evaluation decisions.

The program characteristics rated in this study were identified by:

1. A review of evaluative criteria utilized to rate the quality of programs or institutions in various quality-evaluation studies including those designed to identify "indicators of quality" (e.g., Fotheringham, 1978; Banghart et al., 1978) for educational programs or institutions.
2. A review of various state and federal government reports identifying different types of information currently being collected and reported. The primary source in this area was the Florida Community College Management Information System Manual (Division of Community Colleges, 1980) which contained copies of many data reporting forms, including the required data with formatting requirements, used for various state and federal reports.

From these sources a list of program characteristics was compiled. This list was submitted for review by a panel of community college management information specialists and institutional researchers consisting of IRC institutional representatives for the year 1980-81. A letter (Appendix B) was sent to each representative with a list of the program characteristics requesting that the list be reviewed and characteristics added, deleted or modified in relation to their potential use in program quality-evaluation decision-making. In this review none of the identified characteristics were deleted, six characteristics were added and the descriptions of various characteristics were modified. The 434 program characteristics included in the project questionnaire resulted from this process.

Using these program characteristics, a questionnaire was developed to collect the required data. The questionnaire was submitted for review to the same panel of IRC representatives utilized for refinement of

the program characteristics. The panel evaluated the questionnaire and provided input in the following areas:

1. Refinement of the questionnaire's directions.
2. Refinement of the statements describing the program characteristics.
3. Refinement of the organization of the characteristics.
4. Refinement of the rating scale.
5. Refinement of the questionnaire format.
6. Determination of the time needed for questionnaire completion.

This process resulted in various modifications of the questionnaire which was sent out again for review by the panel. The final form of the questionnaire resulted from this second review. A copy of the questionnaire can be found in Appendix C.

The questionnaire consisted of five sections. Section one requested respondents to print their name, current position and name of college. Section two described the purpose of the project, the organization of the questionnaire and the directions for rating the program characteristics. The program characteristics were organized into four categories concerning information about students, faculty/staff, costs/resources and general information. Examples describing the rating process were provided at the beginning of each category. Respondents were requested to add any program characteristics which they thought were of use but which were not included in the questionnaire.

Section two also contained a description of the four-point rating scale used to rate the program characteristics for degree of usefulness in program quality-evaluation decision-making. The scale was: (1) essential, (2) very useful, (3) some usefulness, and (4) little or no usefulness. Respondents were requested to rate any program characteristics

they perceived as not applicable to their respective program or service area with a "4." The rating scale was printed on a loose insert providing respondents a quick reference when completing the questionnaire (Appendix C).

Section three requested that the respondents indicate the program perspective they would use in rating the program characteristics. Six choices of perspectives were listed: general, advanced and professional, occupational, developmental, community instructional services and student support services. An "other" choice was provided for respondents to specify a perspective different from those listed. Following section three, respondents were requested to proceed in rating the characteristics.

Section four consisted of a series of questions designed to collect demographic data on the respondents. These data included years in present position, years at present college, years in community college education, years in education other than community college education, birthdate, sex and highest degree held.

The fifth section of the questionnaire requested respondents to indicate their opinion of the degree to which their position was associated with each of the program areas, the amount of time they spent in program quality-evaluation decision-making and their level of experience in program quality-evaluation. Also, respondents were requested to add any comments regarding the design of the project, the questionnaire or the program quality-evaluation process at their college.

Collection of Data

During the development of the questionnaire, the review panel was asked to approximate the amount of time needed for its completion. The consensus of the review panel was that approximately 45 minutes to one

hour was needed. Realizing the difficulty of securing the participation of administrators in a project that required such substantial investment of their time, procedures for the collection of data were used that would increase the probability of obtaining their participation.

To gain publicity and support for the project, the endorsement of the Council of Presidents was requested and received. Under this endorsement, a letter (Appendix B) was sent to each community college president describing the project and requesting that they appoint an individual at their college to serve as a project coordinator. Twenty-four of the twenty-eight public community colleges in Florida chose to participate in the project through their appointment of project coordinators.

Project coordinators were sent a letter (Appendix B) thanking them for agreeing to serve and describing their role as project coordinator for their college. The first task of the project coordinator was to identify, by name and position, all administrators at their college who met the criteria for participation in the project (see p. 5). Forms and self-addressed stamped envelopes were included for their convenience in completing this task.

When the lists of administrators were received, letters were sent to all describing the project and encouraging their participation. Packets were prepared for each participating administrator which included a cover letter, a one-page synopsis of the project, the questionnaire and a return label addressed to their institution's project coordinator (Appendix B).

The second task of the project coordinators was to distribute and collect the questionnaires. Each project coordinator was sent a letter (Appendix B) describing the distribution and collection process along

with the prepared packet for each identified administrator at their college. This letter explained that the packets were to be distributed as soon as possible to the participating administrators. The participating administrators were requested to complete the questionnaires within ten days and return them to their college's project coordinator by affixing the included return label. The project coordinators were requested to allow approximately two weeks from the date of the distribution of the project questionnaires for their return and to forward to the IRC the questionnaires that had been returned by that date.

With the return of the completed questionnaires, project coordinators were sent a letter (Appendix B) thanking them for their help, requesting the return of any subsequently received questionnaires and informing them that they were not responsible for conducting follow-up activities. Follow-up procedures involved two steps. First a letter (Appendix B) was sent to those administrators from whom questionnaires had not been received requesting that they complete the questionnaires at their earliest convenience and return them as soon as possible. If this process was ineffective, a second letter (Appendix B) was sent which included a copy of the questionnaire and a request that the administrator complete and return it as soon as possible. Each administrator completing and returning the questionnaire was sent a letter thanking them for their investment of time and effort in the project (Appendix B).

When received, each questionnaire was given a position code based on the reported position and an institutional code based on the reported college. These codes were used to identify the respondents for follow-up and to facilitate classification of the respondents for various analyses. A copy of the position codes used for classifying the respondents

can be found in Appendix D.

Survey Population

The identification of the decision-makers included in the project was the responsibility of the designated project coordinator at each participating college. Project coordinators identified, by name and position, all administrators with some instructional or student personnel services responsibility as identified on the institution's yearly personnel report (SA-1, part 3) as administrative, managerial or professional (Division of Community Colleges, 1980, p. 10.1).

Analysis of the Data

The data were analyzed with the assistance of the SAS (Statistical Analysis System) computer system for data analysis. The mean, standard deviation, variance, range and measures of skewness and kurtosis were calculated for each program characteristic for all respondents and for each classification of respondents described in Appendix A. Using the calculated means, the program characteristics were ranked for all respondents and for respondents in each classification. Spearman rank-order correlation coefficients were calculated for the upper quartile of program characteristics ranked by the mean usefulness-ratings for all respondents and for respondents in each classification.

For all respondents and for respondents classified into the five program areas and the five administrative areas and presidents, the program characteristics in the upper quartile of ranked mean usefulness-ratings were organized into four categories as they were presented in the project questionnaire (program characteristics relating to students, faculty/staff, costs/resources and general information). The differences

or similarities in the program characteristics and in the ranks of the program characteristics contained in these groupings were discussed. For all respondents and for respondents classified into the five program areas, the program characteristics in the upper quartile of ranked mean usefulness-ratings were organized into information profiles using eleven types of information for all program areas except Student Services which required a twelfth type of information. The areas of similarities or differences in these information profiles for each of the five program areas were discussed.

CHAPTER IV

RESULTS

Introduction

This project was designed to assess the degree of usefulness as perceived by administrators of various information (program characteristics) in making quality-evaluation decisions about programs or services offered in Florida's public community colleges. An ancillary purpose was the identification of similarities or differences in the ratings of the program characteristics according to the program and administrative areas with which the administrators were affiliated and according to selected institutional and personal characteristics (see Appendix A).

This chapter presents the results of this project. The results are presented in five sections: a description of the project respondents, presentation of the results for all respondents, presentation of the results for respondents classified by program areas, presentation of the results for respondents classified by administrative areas and presentation of the correlations of the responses by the selected institutional and personal characteristics. A summary of these results with conclusions and recommendations is presented in Chapter V.

Description of Respondents

The results are based upon an analysis of responses received from 450 administrators representing 24 of Florida's 28 public community/ junior colleges. Four colleges did not participate in the project. The response rate was 71.3%. All of the descriptive data collected on

participants were by self-report as indicated on the questionnaire. The number of males to females responding was approximately 3 to 1 (Table IV-1). Ninety percent of the respondents reported having a masters degree or higher (Table IV-1). This was an indication only of level and not type of degree. Seventy-three percent have been at their present college for more than five years (Table IV-1). Almost forty-two percent have been in their present position for more than five years (Table IV-1). More than three-fourths of the respondents reported seven years or more of experience in community college education and more than half reported more than five years in education other than community college education (Table IV-1).

A "position code" was assigned to each respondent based upon the position title reported on the questionnaire. Position codes, corresponding titles and frequencies are listed in Appendix D. Position codes were used to classify respondents into five program areas (Advanced and Professional, Occupational, Developmental, Community Instructional Services and Student Services) and five administrative areas (General Administration, Academic Affairs, Student Affairs, Community Instructional Services and Business Affairs) used in the analysis. Appendix A contains a description of each program and administrative area with a list of position codes included in each area. Only respondents having major responsibility (based on reported position title) in one of the five program areas were included in the analysis by program area. A total of 262 respondents were identified as having major responsibility in one of the five program areas representing fifty-eight percent of the 450 respondents who participated in the project. The number of respondents classified in each program area is reported in Table IV-10. All 450

Table IV-I

Frequencies for All Respondents by Sex, Degree Held, Years at Present College, Years in Present Position, Years in Community College Education and Years in Other Than Community College Education by Self-Report (N = 450)

Variable	Frequency	Percent of N
Sex		
Female	122	27.1
Male	321	71.3
Not reported	7	1.6
Degree Held		
Less than Bachelors	6	1.3
Bachelors	25	5.6
Masters	162	36
Specialist	36	8
Doctorate	207	46
Not reported	14	3.1
Years at Present College		
5 years or less	104	23.1
6 through 10 years	125	27.8
11 through 15 years	126	28
More than 15 years	79	17.6
Not reported	16	3.6
Years in Present Position		
2 years or less	138	30.7
3 through 5 years	113	25.1
6 through 10 years	101	22.4
More than 10 years	86	19.1
Not reported	12	2.7
Years in Community College Education		
6 years or less	94	20.9
7 through 11 years	128	28.4
12 through 15 years	14	25.3
More than 15 years	104	23.1
Not reported	10	2.2
Years in Education Other Than Community College		
None	80	17.8
1 through 5 years	101	22.4
6 through 10 years	84	18.7
More than 10 years	160	35.6
Not reported	25	5.6

respondents were included in the analysis by administrative area. The number of respondents classified in each administrative area is reported in Table IV-2.

In the questionnaire respondents were asked to indicate the amount of time they spent in program quality-evaluation activities, the extent of their involvement in program quality-evaluation decision-making at their institution and their level of experience in program quality-evaluation decision-making (Appendix C). To indicate these opinions, respondents were provided the following scale:

1 = NONE ("None of my activities or time")
2 = LITTLE ("Less than one-fourth but more than none of my activities or time")
3 = SOME ("One-fourth or more but less than three-fourths of my activities or time")
4 = CONSIDERABLE ("Three-fourths or more but less than all of my activities or time")
5 = ALL ("100% of my activities or time")

The frequencies of the responses to these questions are reported in Table IV-2. Over fifty percent of the respondents indicated they spent one-fourth or more of their time in program quality-evaluation activities and thirty-eight percent reported considerable experience in program quality-evaluation decision-making (Table IV-2). Less than ten percent of the respondents indicated they had no involvement in the program quality-evaluation decision-making process at their institutions while fifty-five percent indicated they had some to total involvement (greater than one-fourth of their time) in the process (Table IV-2).

Although some respondents indicated "none" in one of the three areas (time spent, extent of involvement and level of experience in program quality-evaluation decision-making), only ten respondents (2.2%) indicated "none" in all three areas. These ten respondents included three business affairs administrators, two public information officers, one

Table IV-2

Frequencies for All Respondents by Administrative Area, by Time Spent in Program Quality-Evaluation Decision-Making, by Extent of Involvement in Program Quality-Evaluation Decision-Making at Institution and by Level of Experience in Program Quality-Evaluation Decision-Making by Self-Report (N = 450)

Variable	Frequency	Percent of N
Administrative Areas		
General Administration	102	22.7
Academic Affairs	210	46.7
Student Affairs	88	19.6
Community Instructional Services	21	4.7
Business Affairs	29	6.4
Time Spent in Program Quality-Evaluation Decision-Making		
None	31	6.9
Little	149	33.1
Some	166	36.9
Considerable	64	14.2
All	5	1.1
Not Reported	35	7.8
Extent of Involvement in Program Quality-Evaluation Decision-Making		
None	44	9.8
Little	129	28.7
Some	155	34.4
Considerable	85	18.9
All	9	2
Not Reported	28	6.2
Level of Experience in Program Quality-Evaluation Decision-Making		
None	17	3.8
Little	65	14.4
Some	185	41.1
Considerable	171	38
Not Reported	12	2.7

librarian, one registrar, one director of financial aid, one admissions officer and one student services program director.

Results for All Respondents

Mean usefulness-ratings were calculated for each program characteristic in the questionnaire for each classification of respondents described in Appendix A. Using these means, ranks were calculated for the program characteristics for each classification of respondents. When values were tied for a rank, the tied values received the mean of the ranks that would have been assigned had the ranks not tied. The mean usefulness-rating and rank for each characteristic are reported in Appendix E for all respondents and for respondents classified in the program areas. The mean usefulness-rating and rank for each characteristic are reported in Appendix F for respondents classified in the administrative areas and for presidents. The ranks for the program characteristics in the upper quartile of ranked mean usefulness-ratings, based on the ratings by all respondents, are reported in Table IV-3 for all respondents and for respondents classified by program area. The 108 characteristics listed in Table IV-3 are in order by rank as determined for all respondents with the corresponding rank for each characteristic indicated for respondents classified in the five program areas:

Advanced and Professional (Advan. & Prof.)
Occupational (Occup.)
Developmental (Develop.)
Community Instructional Services (Comm. Instr. Serv.)
Student Services (Stu. Serv.)

For all respondents, the program characteristics ranked 1 through 91 ranged respectively from a mean usefulness-rating of 1.38 to a mean usefulness-rating of 1.99 with the program characteristic ranked 108 having a mean usefulness-rating of 2.05. Since the rating scale ranged from 1 (indicating that the program characteristic was considered "essential" in making a judgment about the quality of a program) to 4

Table IV-3

Ranks for Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings for All Respondents With Corresponding Ranks for Respondents Classified into Program Areas

Program Areas (N=262)					All (N=450)	Program Characteristics
Advan. & Prof. (N=65)	Occup. (N=83)	Develop. (N=5)	Comm. Instr. Serv. (N=21)	Stu. Serv. (N=88)		
9	7	1.5	1	3	1	Total cost of program
4	2	12.5	7	18	2	Ratings of program curriculum by program completers
15	1	162.5	11	11	3	Employer opinion of program completers
3	3	19	13	4	4	Number or percent of students completing a program
21	4	4.5	2	16	5	Clearly stated program objectives
7	9	1.5	8.5	22.5	6	Cost of instructional personnel per total program
6	27	76.5	37	14	7	Total cost per program FTE
23.5	15	27	4.5	11	8	Level of demand for program/service in service area
1	26	12.5	64	15	9	Number or percent of fulltime faculty/staff by degrees held
5	5	76.5	3	17	10	Number of students enrolling in a program
10	13	76.5	16	7	11	Number or percent of students withdrawing from a program
55.5	8	294	23	9	12	Number or percent of students passing state board or licensure exams
19	6	4.5	11	22.5	13	Cost of materials per total program
18	11.5	12.5	4.5	8	14	Level of demand for program/service by students
14	33	76.5	45.5	33	15	Cost of instructional personnel per program FTE
30	43	47	42	1	16	Ratings of accessibility of student services by currently enrolled students
12	42	76.5	29.5	19	17	Total cost of program per unduplicated headcount
31.5	10	27	8.5	87	18	Ratings of program facilities/equipment by faculty/staff
63	11.5	47	18.5	50	19	Ratings of program facilities/equipment by program completers

Table IV-3 continued

Program Areas						Program Characteristics
Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.	All	
37.5	63	47	42	2	20	Ratings of ease of use of student services by currently enrolled students
22	18	226.5	14.5	29	21	Job satisfaction ratings by program completers
23.5	15	47	64	34.5	22	Number or percent of fulltime faculty/staff by number of students per term
29	22	12.5	6	103.5	23	Ratings of program instructional strategies by faculty/staff
13	20.5	47	64	25	24	Number or percent of fulltime faculty/staff by years taught/service
33.5	58.5	47	80	5.5	25	Ratings of usefulness of student services by currently enrolled students
26	18	27	39	39	26	Number or percent of fulltime faculty/staff by average class size
20	23	4.5	56.5	31	27	Number or percent of fulltime faculty/staff by number of student contact hours per term
64.5	39	12.5	18.5	24	28	Cost of program administration per total program
69	53.5	12.5	25.5	26	29	Cost of support services per total program
25	29	76.5	145	27	30	Number or percent of fulltime faculty/staff by number of course hours taught per term
16	60.5	105.5	33.5	37.5	31	Cost of instructional personnel per program unduplicated headcount
11	30	27	117	32	32	Number or percent of fulltime faculty/staff by length of service in program
17	64.5	76.5	25.5	45.5	33	Number or percent of parttime faculty/staff by degrees held
40	35	27	48.5	36	34	Ratings of program staff by program completers
62	38	294	71	44	35	Number or percent of program completers by type of license, certificate or registration received

Table IV-3 continued

Program Areas						Program Characteristics
Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.	All	
129	60.5	47	67.5	5.5	36	Ratings of accessibility of student services by program completers
58	49.5	27	33.5	48.5	37	Number of support staff per total program
31.5	24	27	18.5	91.5	38	Ratings of program administration by faculty/staff
91.5	69	47	93.5	13	39	Ratings of usefulness of student services by program completers
82.5	28	294	37	55.5	40	Number or percent of program completers taking state board or licensure exams
27.5	56.5	76.5	37	77.5	41	Cost of materials per program FTE
99	18	12.5	21.5	99.5	42	Ratings of program instructional strategies by program completers
2	40	47	222	58	43	Ratio of parttime to fulltime faculty/staff
45	44	4.5	48.5	48.5	44	Cost of equipment maintenance per total program
77	32	162.5	71	83	45	Ratings by accreditation agencies
75.5	37	76.5	56.5	43	46	Number or percent of fulltime faculty/staff by productivity ratio
33.5	41	76.5	95	28	47	Number or percent of fulltime faculty/staff by rate of faculty/staff turnover
39	53.5	76.5	42	41.5	48	Cost of materials per program unduplicated headcount
58	35	47	18.5	77.5	49	Number or percent of parttime faculty/staff by average class size
129	82	47	75.5	11	50	Ratings of ease of use of student services by program completers
42	45	76.5	126.5	63.5	51	Equipment utilization per total program
109	15	27	14.5	144	52	Ratings of a program curriculum by faculty/staff
43	53.5	105.5	25.5	105.5	53	Ratings of support services by faculty/staff
86	47	168	29.5	105.5	54	Ratings by certification boards

Table IV-3-continued

Program Areas						Program Characteristics
Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.	All	
44	71	194.5	87.5	47	55	Program admission requirements
58	35	76.5	42	87	56	Number or percent of parttime faculty/staff by number of students per term
106	20.5	268	75.5	71	57	Number or percent of program completers holding jobs for which trained
8	97	27	117	34.5	58	Number or percent of fulltime faculty/staff by certification/rank
75.5	58.5	47	33.5	87	59	Ratings of program facilities/equipment by currently enrolled students
129	74	27	113	20.5	60	Ratings of support services by program completers
142	82	12.5	87.5	20.5	61	Ratings of support services by currently enrolled students
81	56.5	47	87.5	67.5	62	Level of demand for program/service in state
51	99.5	76.5	71	52	63	Cost of program administration per program FTE
80	67	12.5	33.5	73	64	Number/types of changes as a result of program evaluation
61	49.5	12.5	21.5	164.5	65	Ratings of program staff by faculty/staff
109	67	27	59.5	81.5	66	Ratings of program staff by currently enrolled students
51	47	130.5	161	109	67	Number or percent of fulltime faculty/staff by level of use of alternative instructional methods
53.5	29	76.5	117	69	68.5	Number or percent of fulltime faculty/staff by level of participation in program decision-making
73	117	105.5	51	70	68.5	Cost of support services per program FTE
91.5	47	12.5	48.5	111.5	70	Number or percent of parttime faculty/staff by number of student contact hours per term
115	51	105.5	29.5	96.5	71	Number or percent of parttime faculty/staff by productivity rate
100	92	27	59.5	45.5	72	Cost of space utilized per total program

Table IV-3-continued

Program Areas						Program Characteristics
Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.	All	
64.5	77	130.5	87.5	98	73	Space utilization per total program
46	113	76.5	126.5	76	74	Number or percent of entering students by types of developmental or remedial assistance desired
90	119.5	105.5	67.5	37.5	75	Cost of support services per program unduplicated headcount
113	64.5	47	67.5	53.5	76	Number or percent of entering students by type of handicap
41	111	47	165	93	77	Number or percent of entering students by academic skills level as measured by local instruments
71	31	358	139	61	78	Number or percent of entering students by major area of study
97.5	92	76.5	113	41.5	79	Cost of program administration per program unduplicated headcount
49	86	47	199.5	80	80	Number or percent of fulltime faculty/staff by number of FTE per term
115	70	47	53.5	147.5	81	Ratings of program instructional strategies by currently enrolled students
53.5	53.5	358	148.5	57	82	Number or percent of currently enrolled students by major area of study
36	79	145	93.5	127	83	Number or percent of program completers by average time taken for completion of a program
109	75.5	47	146	99.5	84	Number/types of changes as a result of accrediataion studies
66.5	88	76.5	11	111.5	85	Number or percent of parttime faculty/staff by years taught/service
88	111	105.5	157	119.5	86	Number or percent of currently enrolled students by types of developmental or remedial assistance desired

Table IV-3-continued

Program Areas						Program Characteristics
Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.	All	
120.5	62	162.5	99.5	119.5	87	Number or percent of parttime faculty/staff by number of course hours taught per term
55.5	106.5	226.5	216.5	75	88	Number or percent of currently enrolled students by average GPA of students in program
51	102.5	76.5	132.5	130	89	Cost of equipment maintenance per program FTE
60	80	76.5	29.5	132	90	Number or percent of parttime faculty/staff by length of service in a program
103	106.5	226.5	110	107	91	Number or percent of currently enrolled students by percent of total college FTE in program
126.5	86	318	175.5	65.5	92	Number or percent of currently enrolled students by number of hours with failing grade
120.5	84	268	315.5	65.5	93	Number or percent of currently enrolled students by cumulative GPA categories for program-related coursework
135	90	47	25.5	138	94	Ratings of a program curriculum by currently enrolled students
95.5	137.5	76.5	120	124	95	Number of support staff per program FTE
72	98	105.5	157	114.5	96	Equipment utilization per program unduplicated headcount
94	101	194.5	260.5	140	97	Number of library holdings per total program
140.5	75.5	47	87.5	91.5	98	Number or percent of currently enrolled students by type of handicap
136	133	105.5	126.5	63.5	99	Number of support staff per program unduplicated headcount
143.5	86	27	126.5	131	100	Ratings of program administration by program completers
37.5	104.5	76.5	184	164.5	101	Equipment utilization per program FTE
106	111	162.5	165	116	102	Number or percent of entering students by level of previous academic achievement
27.5	129	76.5	62	119.5	103	Number or percent of parttime faculty/staff by certification/rank

Table IV-3-continued

Program Areas						Program Characteristics
Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.	All	
132	145	145	80	55.5	104	Number or percent of currently enrolled students by percent of total college unduplicated headcount in program
161	123	105.5	45.5	101	105	Ratings of usefulness of student services by faculty/staff
131	67	130.5	99.5	186	106	Number or percent of parttime faculty/staff by level of use of alternative instructional methods
95.5	92	76.5	82	102	107	Number or percent of fulltime faculty/staff by level of compensation
35	137.5	130.5	209	144	108	Number or percent of currently enrolled students by academic skills level as measured by local instruments

(indicating that the program characteristic was considered of "little or no usefulness" or "not applicable" in arriving at a judgment of the quality of a program), all 108 characteristics in Table IV-3 had a mean usefulness-rating on the "essential" side of the rating scale. The mean usefulness-ratings for all respondents ranged from 1.38 to 3.48 for all 434 program characteristics (Appendix E).

In the questionnaire, the program characteristics were organized into four categories relating to students, faculty/staff, costs/resources and general information (Appendix C). The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by all respondents among all four categories of program characteristics is reported in Table IV-4.

The program characteristics relating to students in the upper

Table IV-4

Distribution by Category of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by All Respondents

	Category	Number of Characteristics	Percentage of Upper Quartile Characteristics
I.	Program Characteristics Relating to Students	22	20.4%
II.	Program Characteristics Relating to Faculty/Staff	25	23.1%
III.	Program Characteristics Relating to Costs/Resources	26	24.1%
IV.	Program Characteristics Relating to General Information	35	32.4%
		108	100.0%

quartile of mean usefulness-ratings for all respondents are listed in Table IV-5. Program characteristics relating to program completers received the highest ratings for usefulness in making program quality-evaluation decisions combined with number of students enrolling in a program (rank 10) and number or percent of students withdrawing from a program (rank 11). Next in perceived usefulness in program quality-decision-making were program characteristics relating to entering

Table IV-5

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings by All Respondents With Ranks

Ranks	Program Characteristics
10	Number of students enrolling in a program
	Number or percent of entering students:
74	by types of developmental or remedial assistance desired
76	by type of handicap
77	by academic skills level as measured by local instruments
78	by major area of study
102	by level of previous academic achievement
	Number or percent of currently enrolled students:
82	by major area of study
86	by types of developmental or remedial assistance desired
88	by average GPA of students in program
91	by percent of total college FTE in program
92	by number of hours with failing grade
93	by cumulative GPA categories for program-related coursework
98	by type of handicap
104	by percent of total college unduplicated headcount in program
108	by academic skills level as measured by local instruments
4	Number or percent of students completing a program
	Number or percent of program completers:
12	passing state board or licensure exams
35	by type of license, certificate or registration received
40	taking state board or licensure exams
57	holding jobs for which trained
83	by average time taken for completion of a program
11	Number or percent of students withdrawing from a program

students followed by program characteristics relating to currently enrolled students. Four of the five program characteristics rated as highly useful for program quality-evaluation decision-making relating to entering students were included in the program characteristics relating to currently enrolled students.

The program characteristics relating to faculty/staff in the upper quartile of mean usefulness-ratings by all respondents are listed in Table IV-6. Although the rank-order differs, all of the program

Table IV-6

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings by All Respondents With Ranks

Ranks	Program Characteristics
43	Ratio of parttime to fulltime faculty/staff
	Number or percent of fulltime faculty/staff:
9	by degrees held
22	by number of students per term
24	by years taught/service
26	by average class size
27	by number of student contact hours per term
30	by number of course hours taught per term
32	by length of service in program
46	by productivity ratio
47	by rate of faculty/staff turnover
58	by certification/rank
67	by level of use of alternative instructional methods
68.5	by level of participation in program decision-making
80	by number of FTE per term
107	by level of compensation
	Number or percent of parttime faculty/staff:
33	by degrees held
49	by average class size
56	by number of students per term
70	by number of student contact hours per term
71	by productivity ratio
85	by years taught/service
87	by number of course hours taught per term
90	by length of service in a program
103	by certification/rank
106	by level of use of alternative instructional methods

characteristics rated as highly useful in making program quality-evaluation decisions and which related to parttime faculty/staff appeared in the list for fulltime faculty/staff. The program characteristic "Number or percent of faculty/staff by degrees held" had the highest rank for the program characteristics related to both fulltime and parttime faculty/staff. The ten program characteristics common to both fulltime and parttime faculty/staff appeared to be indicators of: level of preparation (degrees held and certification/rank); level of experience (years taught/service, length of service); level of productivity (number of students, student contact hours, course hours taught per term, average class size, productivity ratio) and level of instructional skill (use of alternative instructional methods). For fulltime faculty/staff there was an additional productivity indicator (number of FTE per term). Four program characteristics related to fulltime faculty/staff appeared to be indicators of the functioning of program/service administration: ratio of parttime to fulltime faculty/staff, rate of faculty/staff turnover, level of participation in decision-making and level of compensation.

The program characteristics related to costs/resources in the upper quartile of mean usefulness-ratings by all respondents are listed in Table IV-7. Three of the top ten program characteristics ranked by mean usefulness-ratings by all respondents were included in this category of program characteristics: total cost per total program (rank 1), total cost per program FTE (rank 7) and cost of instructional personnel per total program (rank 6). There were seven types of program characteristics rated as highly useful in program quality-evaluation decision-making related to costs/resources: total cost, cost of administration, cost of instructional personnel, cost of support services, cost of

Table IV-7

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings by All Respondents With Ranks

Ranks	Program Characteristics
	Total cost:
1	per total program
7	per program FTE
17	per program unduplicated headcount
	Cost of administration:
28	per total program
63	per program FTE
79	per program unduplicated headcount
	Cost of instructional personnel:
6	per total program
15	per program FTE
31	per program unduplicated headcount
	Cost of support services:
29	per total program
68.5	per program FTE
75	per program unduplicated headcount
	Cost of materials:
13	per total program
41	per program FTE
48	per program unduplicated headcount
	Cost of equipment maintenance:
44	per total program
89	per program FTE
72	Cost of space utilized per total program
	Number of support staff:
37	per total program
95	per program FTE
99	per program unduplicated headcount
	Equipment utilization:
51	per total program
96	per program unduplicated headcount
101	per program FTE
73	Space utilization per total program
97	Number of library holdings per total program

materials, cost of equipment maintenance and cost of space utilized. For the first five of these the program characteristic had the highest usefulness rating per total program followed by per program FTE which was

followed by per program unduplicated headcount. Four other types of program characteristics related to costs/resources were rated as highly useful in making program quality-evaluation decisions: number of support staff, equipment utilization, space utilization and number of library holdings. The order of emphasis for usefulness in program quality-evaluation decision-making per total program was: total cost, cost of instructional personnel, cost of materials, cost of administration, cost of support services, number of support staff, cost of equipment maintenance, equipment utilization, cost of space utilized, space utilization and number of library holdings. The order of emphasis per program FTE and per program unduplicated headcount varied slightly from the order of emphasis per total program.

The program characteristics related to general information in the upper quartile of mean usefulness-ratings by all respondents are listed in Table IV-8. Four of the top ten program characteristics ranked by mean usefulness-ratings by all respondents were in this category: ratings of a program curriculum by program completers (rank 2), employer opinion of program completers (rank 3), clearly stated program objectives (rank 5) and level of demand for program/service in service area (rank 8). Ratings of various aspects of a program/service by various groups were rated as highly useful in making program quality-evaluation decisions. Ratings of a program curriculum and program staff by program completers had the highest usefulness-rating followed by ratings by faculty/staff and then ratings by currently enrolled students. A different ranking for type of rater occurred for ratings of program facilities/equipment, program instructional strategies, program administration and support services. For these aspects of a program/service

Table IV-8

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings by All Respondents With Ranks

Ranks	Program Characteristics
3	Employer opinion of program completers
5	Clearly stated program objectives
	Level of demand for program/service
8	in service area
14	by students
62	in state
55	Program admission requirements
45	Ratings by accreditation agencies
54	Ratings by certification boards
	Number/types of changes as a result of:
64	program evaluation
84	accreditation studies
21	Job satisfaction ratings by program completers
	Ratings of a program curriculum:
2	by program completers
52	by faculty/staff
94	by currently enrolled students
	Ratings of program facilities/equipment:
18	by faculty/staff
19	by program completers
59	by currently enrolled students
	Ratings of program instructional strategies
23	by faculty/staff
42	by program completers
81	by currently enrolled students
	Ratings of program staff:
34	by program completers
65	by faculty/staff
66	by currently enrolled students
	Ratings of program administration:
38	by faculty/staff
100	by program completers
	Ratings of support services:
53	by faculty/staff
60	by program completers
61	by currently enrolled students
	Ratings of accessibility of student services:
16	by currently enrolled students
36	by program completers
	Ratings of ease of use of student services:
20	by currently enrolled students
50	by program completers
	Ratings of usefulness of student services:
25	by currently enrolled students
39	by program completers
105	by faculty/staff

ratings by faculty/staff were rated as most useful followed by ratings by program completers which was followed by ratings by currently enrolled students, except that the latter ratings were not rated as highly useful for rating program administration. For the ratings of student services, a different ranking for raters occurred. Ratings by currently enrolled students of accessibility of student services, ease of use of student services and usefulness of student services were rated as most useful followed by ratings by program completers. Program admission requirements, ratings by accreditation agencies and certification boards and changes resulting from program evaluations and accreditation studies were rated, also, as highly useful in making quality-evaluation decisions about programs or services.

From these tables (IV-5 to IV-8), it may be seen that a wide variety of program characteristics as rated for degree of usefulness in program quality-evaluation decision-making by all respondents had high mean usefulness-ratings (ranging from 1.38 to 2.05). In Table IV-9 the 108 program characteristics in the upper quartile of mean usefulness-ratings by all respondents are organized into eleven types of information:

Need for and structure of a program
Size
Costs
Utilization rates
Support services
Information on entering students
Information on currently enrolled students
Information on faculty/staff
Information from external/internal evaluations
Quantitative output
Ratings

In this one table all the program characteristics rated as highly useful by all respondents are displayed in a comprehensive multi-variate information profile for making quality-evaluation decisions about programs

Table IV-9

Information Profile of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by All Respondents (N=450)

Information Type	Program Characteristics Relating to Information Type
Need and structure	Clearly stated program objectives, level of demand for program, program admission requirements
Size	Number enrolling, percent of total college FTE and unduplicated headcount
Costs	Total, instructional personnel, materials, administration, support services, equipment maintenance, space utilized
Utilization rates	Equipment, space
Support services	Number of support staff, number of library holdings
Entering students	Type of developmental or remedial assistance desired, type of handicap, academic skills level (previous and as assessed by local instruments), major area of study
Currently enrolled students	Same as for entering students without level of previous academic achievement and adding information on performance of students in program (GPA, cumulative GPA, hours with failing grade)
Faculty/ staff	For both fulltime and parttime: ratio of parttime to fulltime; level of preparation (degrees held, certification/ rank); level of experience (years taught/service, length of service); level of productivity (number of students, student contact hours and course hours taught per term, average class size, productivity ratio); level of instructional skill (use of alternative instructional methods). For fulltime: rate of turnover; level of participation in program decision-making; level of compensation; number of FTE per term
External/ internal evaluations	Ratings by accreditation agencies and certification boards, number/types of changes as result of these studies and other program evaluation
Quantitative output	Number or percent: completing; taking and passing state board or licensure exams; by type of license, certificate, or registration received; holding jobs for which trained; by average time for completion; withdrawing
Ratings	Of program completers by employers; of job satisfaction by program completers; of a program's curriculum, facilities/ equipment, instructional strategies, staff and administration by various types of raters; of support services and student services by various types of raters

or services as perceived by administrators in Florida's community colleges.

Results for Program Areas

The preceding describes the program characteristics rated as most

highly useful based upon the mean usefulness-ratings by all respondents. There were differences in the program characteristics in the upper quartile of mean usefulness-ratings when the responses were analyzed by respondents classified in the five program areas: Advanced and Professional, Occupational, Developmental, Community Instructional Services and Student Services. Only respondents who, based upon their position title, were perceived as having major responsibility in one of the five program areas were included in the analysis by program area. The position codes included in each program area are listed in Appendix A. The number of respondents in each program area and the percentage of all respondents which this represents are given in Table IV-10.

Table IV-10

Number of Respondents Per Program Area and Corresponding Percentages of All Respondents (N = 450)

Program Area	No. of Respondents	Percentage of N
Advanced and Professional	65	14.4
Occupational	83	18.4
Developmental	5	1.1
Community Instructional Services	21	4.7
Student Services	88	19.6
TOTAL	262	58.2

Using the ranked mean usefulness-ratings for the same 108 program characteristics as reported in Table IV-3, Spearman rank-order correlation coefficients were calculated between the five program areas and between all respondents and each program area. These are reported in Table IV-11. They ranged from a low of .25 to a high of .64, excluding

Table IV-11

Spearman Rank-Order Correlation Coefficients for the Upper Quartile of Mean Usefulness-Ratings by All Respondents for Respondents Classified in the Five Program Areas

	All	Advan. & Prof.	Occup.	Develop.	Comm. Instr. Serv.	Stu. Serv.
All	1.00	.69	.85	.43	.66	.77
Advan. & Prof.		1.00	.55	.25	.35	.47
Occup.			1.00	.34	.64	.50
Develop.				1.00	.43	.29
Comm. Instr. Serv.					1.00	.33
Stu. Serv.						1.00

the correlation coefficients of each program area with all respondents. The coefficients indicated considerable variability in the degree of similarity of the ranked upper quartile mean usefulness-ratings among the program areas. To determine where the differences and similarities occurred in the program characteristics among the program areas, the program characteristics in the upper quartile of mean usefulness-ratings for each program area were identified. They are reported for each program area in the same manner as the program characteristics in the upper quartile of mean usefulness-ratings for all respondents were presented, i.e., organized into the four categories (program characteristics related to students, faculty/staff, costs/resources and general information) and then displayed in a summary information-profile table. The mean

usefulness-ratings for all program characteristics for each program area are reported in Appendix E.

Results-Advanced and Professional Program Area

The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area among the four categories of program characteristics is reported in Table IV-12. Compared to the distribution for all

Table IV-12

Distribution by Category of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents (N = 65) Classified in the Advanced and Professional Program Area

Category	Number of Characteristics	Percentage of Upper Quartile Characteristics
I. Program Characteristics Relating to Students	30	28.0
II. Program Characteristics Relating to Faculty/Staff	24	22.4
III. Program Characteristics Relating to Costs/Resources	29	27.1
IV. Program Characteristics Relating to General Information	24	22.4
TOTAL	107	99.9

respondents (Table IV-4), respondents classified in the Advanced and Professional Program Area identified more characteristics related to students and fewer characteristics related to general information as highly useful in program quality-evaluation decision-making. The means of the usefulness-ratings for these program characteristics ranged from

1.28 to 1.95 (Appendix E). The program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area are presented with ranks in the next four tables. Those related to students are presented in Table IV-13, those

Table IV-13

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Advanced and Professional Program Area With Ranks

Ranks	Program Characteristics
5	Number of students enrolling in a program
	Number or percent of entering students:
41	by academic skills level as measured by local instruments
46	by types of developmental or remedial assistance desired
47.5	by academic skills level as measured by state instruments
71	by major area of study
88	by academic skills level as measured by national instruments
102	by degree level sought
106	by level of previous academic achievement
	Number or percent of currently enrolled students:
35	by academic skills level as measured by local instruments
53.5	by major area of study
55.5	by average GPA of students in program
68	by academic skills level as measured by state instruments
82.5	by average course load for students in program
88	by academic skills level as measured by national instruments
88	by types of developmental or remedial assistance desired
93	by number of hours of developmental/remedial work
101	by performance on standardized state tests
103	by percent of total college FTE in program
3	Number or percent of students completing a program
	Number or percent of program completers:
36	by average time taken for completion of a program
47.5	by performance on standardized state tests
55.5	passing state board or licensure exams
62	by type of license, certificate or registration received
70	by performance on standardized national tests
74	by major area of study
82.5	taking state board or licensure exams
84.5	by academic skills level as measured by local instruments
106	holding jobs for which trained
106	by academic skills level as measured by state instruments
10	Number or percent of students withdrawing from a program

related to faculty/staff in Table IV-14, those related to costs/resources in Table IV-15 and those related to general information in Table IV-16.

Table IV-13 shows that respondents classified in the Advanced and Professional Program Area rated as highly useful in making quality-evaluation decisions program characteristics concerning the measuring of academic skills through testing for all categories of students (entering, currently enrolled, completers). Types of testing identified included local, state and national instruments with the mean usefulness-ratings ranked in the order as cited for entering and currently enrolled students. For program completers, the mean usefulness-ratings rank order was standardized state tests, standardized national tests and local instruments. Only one program characteristic related to testing appeared in the upper quartile of mean usefulness-ratings by all respondents: number or percent of entering and currently enrolled students by academic skills as measured by local instruments (Table IV-5).

Three of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area related to faculty/staff (Table IV-14): number or percent of fulltime faculty/staff by degrees held (rank 1), by certification/rank (rank 8) and the ratio of parttime to fulltime faculty/staff (rank 2). All of the program characteristics related to fulltime faculty/staff in the upper quartile of mean usefulness-ratings by all respondents (Table IV-6) were in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area. Two program characteristics appeared which were not in the upper quartile of mean usefulness-ratings by all respondents: the ratio of faculty to student support staff and the ratio of faculty/staff to

Table IV-14

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Advanced and Professional Program Area With Ranks

Ranks	Program Characteristics
2	Ratio of parttime to fulltime faculty/staff
78	Ratio of faculty to student support staff
84.5	Ratio of faculty/staff to clerical staff
	Number or percent of fulltime faculty/staff:
1	by degrees held
8	by certification/rank
11	by length of service in program
13	by years taught/service
20	by number of student contact hours per term
23.5	by number of students per term
25	by number of course hours taught per term
26	by average class size
33.5	by rate of faculty/staff turnover
49	by number of FTE per term
51	by level of use of alternative instructional methods
53.5	by level of participation in program decision-making
75.5	by productivity ratio
99.5	by level of compensation
	Number or percent of parttime faculty/staff:
17	by degrees held
27.5	by certification/rank
58	by average class size
58	by number of students per term
60	by length of service in a program
66.5	by years taught/service
91.5	by number of student contact hours per term

clerical staff. Both of these appeared to be additional indicators of the functioning of program/service administration. For the program characteristics related to parttime faculty/staff, those in the upper quartile of mean usefulness-ratings by all respondents (Table IV-6) were in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area except three:

productivity ratio, number of course hours taught per term and level of use of alternative instructional methods.

Program characteristics related to costs/resources (Table IV-15)

Table IV-15

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Advanced and Professional Program Area With Ranks

Ranks	Program Characteristics
	Total cost:
6	per program FTE
9	per total program
12	per program unduplicated headcount
	Cost of administration:
51	per program FTE
64.5	per total program
97.5	per program unduplicated headcount
	Cost of instructional personnel:
7	per total program
14	per program FTE
16	per program unduplicated headcount
	Cost of support services:
69	per total program
73	per program FTE
90	per program unduplicated headcount
	Cost of materials:
19	per total program
27.5	per program FTE
39	per program unduplicated headcount
	Cost of equipment maintenance:
45	per total program
51	per program FTE
97.5	per program unduplicated headcount
100	Cost of space utilized per total program
	Number of support staff:
58	per total program
95.5	per program FTE
	Equipment utilization:
37.5	per program FTE
42	per total program
72	per program unduplicated headcount
	Space utilization:
64.5	per total program
66.5	per program FTE
79	per program unduplicated headcount
	Number of library holdings:
94	per total program
104	per program FTE

also had high mean usefulness-ratings for respondents classified in the Advanced and Professional Program Area. Three of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in this program area related to costs/resources: total cost per program FTE (rank 6) and per total program (rank 9) and cost of instructional personnel per total program (rank 7). The order of emphasis for usefulness in Advanced and Professional program quality-evaluation decision-making per total program was cost of instructional personnel, total cost, cost of materials, equipment utilization, cost of equipment maintenence, number of support staff, cost of administration, space utilization, cost of support services, number of library holdings and cost of space utilized. The order of emphasis per program FTE and per program unduplicated headcount varied slightly from the order of emphasis per total program. In addition to the program characteristics related to costs/resources which appeared in the upper quartile of mean usefulness-ratings by all respondents (Table IV-7), respondents classified in the Advanced and Professional Program Area indicated as highly useful space utilization per program FTE and per program unduplicated headcount, cost of equipment maintenance per program unduplicated headcount and number of library holdings per program FTE. Number of support staff per program unduplicated headcount, in the upper quartile of mean usefulness-ratings by all respondents (Table IV-7) did not appear in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area.

Only one of the top ten program characteristics ranked by mean usefulness-ratings for respondents classified in the Advanced and Professional Program Area related to general information (Table IV-16): ratings

Table IV-16

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Advanced and Professional Program Area With Ranks

Ranks	Program Characteristics
21	Clearly stated program objectives
44	Program admission requirements
	Level of demand for program/service:
18	by students
23.5	in service area
81	in state
77	Ratings by accreditation agencies
86	Ratings by certification boards
80	Number/types of changes as a result of program evaluation
15	Employer opinion of program completers
22	Job satisfaction ratings by program completers
4	Ratings of a program curriculum by program completers
	Ratings of program facilities/equipment:
31.5	by faculty/staff
63	by program completers
75.5	by currently enrolled students
	Ratings of program instructional strategies:
29	by faculty/staff
99	by program completers
	Ratings of program staff:
40	by program completers
61	by faculty/staff
31.5	Ratings of program administration by faculty/staff
43	Ratings of support services by faculty/staff
30	Ratings of accessibility of student services by currently enrolled students
37.5	Ratings of ease of use of student services by currently enrolled students
	Ratings of usefulness of student services:
33.5	by currently enrolled students
91.5	by program completers

of a program curriculum by program completers (rank 4). In order, by mean usefulness-rating rank, this was followed by employer opinion of program completers (rank 15), level of demand for program/service by students (rank 18), clearly stated program objectives (rank 21) and job

satisfaction ratings by program completers (rank 22). Ratings by faculty/staff of program instructional strategies, program facilities/equipment, program administration and support services had higher mean usefulness-ratings than ratings by either program completers or currently enrolled students. For ratings of program staff, ratings by program completers rather than by faculty/staff had a higher mean usefulness-rating rank. Neither ratings of program instructional strategies, program staff or support services by currently enrolled students nor ratings of program administration or support services by program completers appeared in the upper quartile mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area. They were in the upper quartile of mean usefulness-ratings by all respondents (Table IV-8).

Ratings of accessibility, usefulness and ease of use of student services by currently enrolled students had a higher mean usefulness rating rank than such ratings by either program completers or faculty/staff. Three other types of characteristics related to general information were rated as highly useful in program quality-evaluation decision-making by respondents classified in the Advanced and Professional Program Area: program admission requirements, ratings by accreditation agencies and certification boards and number/types of changes as a result of program evaluation. These occurred in the upper quartile of mean usefulness-ratings by all respondents also (Table IV-8).

In Table IV-17, the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area were organized into a program quality-evaluation information profile using the same eleven types of information

Table IV-17

Information Profile of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Advanced and Professional Program Area

Information Type	Program Characteristics Relating to Information Type
Need and structure	Level of demand for program, clearly stated program objectives, program admission requirements
Size	Number enrolling, percent of total college FTE
Costs	Instructional personnel, total, materials, equipment maintenance, administration, support services, space utilized
Utilization rates	Equipment, space
Support services	Number of support staff, number of library holdings
Entering students	Academic skills level as measured by local, state and national instruments, types of developmental or remedial assistance desired, major area of study, degree level sought, level of previous academic achievement
Currently enrolled students	Same as for entering students without degree level sought and level of previous academic achievement and adding average GPA and average course load of students in program, number of hours of developmental/remedial work, performance on standardized state tests
Faculty/staff	For both fulltime and parttime: ratio of parttime to fulltime; level of preparation (degrees held, certification/rank); level of experience (years taught/service, length of service in program); level of productivity (number of student contact hours per term, number of students per term). For fulltime: level of productivity (number of course hours taught per term, number of FTE per term, productivity ratio); level of instructional skill (level of use of alternative instructional methods); rate of turnover; level of participation in program decision-making; level of compensation; ratio of faculty to student support staff; ratio of faculty/staff to clerical staff
External/internal evaluations	Ratings by accreditation agencies and certification boards, number/types of changes as a result of program evaluation
Quantitative outputs	Number or percent: completing; taking and passing state board or licensure exams; by type of license, certificate, or registration received; holding jobs for which trained; by average time for completion; performance on standardized state and national tests and on local and state instruments; by major area of study; withdrawing
Ratings	Of program completers by employers; of job satisfaction by program completers; of a program's curriculum, facilities/equipment, instructional strategies, staff and administration by various types of raters; of support services and student services by various types of raters

which were used in the program quality-evaluation information profile for all respondents (Table IV-9). A comparison of Tables IV-9 and IV-17 shows clearly the similarities and differences in the two information profiles. Although the order of emphasis varied relating to usefulness of the program characteristics in program quality-evaluation decision-making, the areas of similarity were in the information types of need and structure, size, costs, utilization rates, support services, external/internal evaluations and ratings. The areas of differences were in the information types of entering students, currently enrolled students, faculty/staff and quantitative outputs.

Results-Occupational Program Area

The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area among the four categories of program characteristics is reported in Table IV-18. There were 109 program characteristics identified for the Occupational Program Area because two were tied for rank 108. Compared to the distribution for respondents classified in the Advanced and Professional Program Area (Table IV-12), respondents classified in the Occupational Program Area identified approximately ten percent more program characteristics related to general information, six percent more program characteristics related to costs/resources and six percent less program characteristics related to students. The distribution of the program characteristics among the four categories for respondents classified in the Occupational Program Area was similar to the distribution for all respondents reported in Table IV-4. For the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area, the means of the

Table IV-18

Distribution by Category of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Occupational Program Area

Category		Number of Characteristics	Percentage of Upper Quartile Characteristics
I.	Program Characteristics Relating to Students	24	22.0
II.	Program Characteristics Relating to Faculty/Staff	28	25.7
III.	Program Characteristics Relating to Costs/Resources	23	21.1
IV.	Program Characteristics Relating to General Information	34	31.2
	TOTAL	109	100.0

usefulness-ratings ranged from 1.21 to 1.99 (Appendix E).

The program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area are presented with ranks in the next four tables. Those related to students are reported in Table IV-19, those related to faculty/staff in Table IV-20, those related to costs/resources in Table IV-21 and those related to general information in Table IV-22.

The top ranked program characteristics by mean usefulness-ratings related to students for respondents classified in the Occupational Program Area (Table IV-19) were similar to those for respondents classified in the Advanced and Professional Program Area (Table IV-13): number or percent of students completing a program (rank 3), number of students enrolling in a program (rank 5) and number or percent of students

Table IV-19

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Occupational Program Area With Ranks

Ranks	Program Characteristics
5	Number of students enrolling in a program
	Number or percent of entering students:
31	by major area of study
64.5	by type of handicap
72	by career decision status
94	by degree level sought
102.5	by level of awareness of college's programs, services, etc.
	Number or percent of currently enrolled students:
53.5	by major area of study
75.5	by type of handicap
84	by cumulative GPA categories for program-related coursework
86	by number of hours with failing grade
95.5	by career decision status
104.5	by degree level sought
106.5	by average GPA of students in program
106.5	by percent of total college FTE in program
3	Number or percent of students completing a program
	Number or percent of program completers:
8	passing state board or licensure exams
20.5	holding jobs for which trained
28	taking state board or licensure exams
38	by type of license, certificate or registration received
78	by salary categories
79	by average time taken for completion of a program
95.5	by major area of study
99.5	by employment status
13	Number of percent of students withdrawing from a program

withdrawing from a program (rank 13). The exception was the program characteristic "number or percent of program completers passing state board or licensure exams" which had a mean usefulness-rating rank of 8

for respondents classified in the Occupational Program Area and a rank of 55.5 for respondents in the Advanced and Professional Program Area (Table IV-13). There were no program characteristics which related to the measurement of academic skills in the upper quartile of mean usefulness-ratings for respondents classified in the Occupational Program Area. This contrasted sharply with the number of such measures identified by respondents classified in the Advanced and Professional Program Area (Table IV-13). Only two program characteristics which related to entering students were in the upper quartile mean usefulness-ratings by both Occupational and Advanced and Professional respondents: number or percent of entering students by major area of study and by degree level sought. Instead of academic measures for testing of entering students, which appeared in the upper quartile mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area (Table IV-13), respondents classified in the Occupational Program Area rated as most highly useful the number or percent of entering students by type of handicap, by career decision status and by level of awareness of the college's programs and services. Four of the five program characteristics rated by respondents classified in the Occupational Program Area as highly useful in relation to entering students were rated by the same respondents as highly useful in relation to currently enrolled students: number or percent of currently enrolled students by major area of study, by type of handicap, by career decision status and by degree level sought. Only three of the ten characteristics which related to currently enrolled students rated as highly useful by respondents classified in the Advanced and Professional Program Area were similarly rated by respondents classified in the Occupational Program Area: number or percent of currently

enrolled students by major area of study, by average GPA of students in program and by percent of total college FTE in program. In addition to these characteristics which related to currently enrolled students, respondents classified in the Occupational Program Area rated as highly useful in Occupational program quality-evaluation decision-making the number or percent of currently enrolled students by cumulative GPA categories for program-related coursework and by number of hours with failing grade. Although the rank-order differed, there was more agreement among respondents classified in the Occupational Program Area and the Advanced and Professional Program Area regarding program characteristics related to program completers. Six of the ten program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program which related to program completers were similarly identified by respondents classified in the Occupational Program Area. The differences were that respondents classified in the Occupational Program Area rated number or percent of program completers by salary categories and by employment status as highly useful rather than skills as measured by tests.

Whereas three of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area related to faculty/staff (Table IV-14), none of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in the Occupational Program Area related to faculty/staff (Table IV-20). However, although the rank-order differed, all of the program characteristics which related to faculty/staff in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area were similarly rated by respondents

Table IV-20

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Occupational Program Area With Ranks

Ranks	Program Characteristics
40	Ratio of parttime to fulltime faculty/staff
73	Ratio of faculty/staff to clerical staff
89	Ratio of faculty to student support staff
108.5	Ratio of faculty/staff to administrative personnel
	Number or percent of fulltime faculty/staff:
15	by number of students per term
18	by average class size
20.5	by years taught/service
23	by number of student contact hours per term
26	by degrees held
29	by number of course hours taught per term
29	by level of participation in program decision-making
30	by length of service in program
37	by productivity ratio
41	by rate of faculty/staff turnover
47	by level of use of alternative instructional methods
86	by number of FTE per term
92	by level of compensation
97	by certification/rank
	Number or percent of parttime faculty/staff:
35	by number of students per term
35	by average class size
47	by number of student contact hours per term
51	by productivity ratio
62	by number of course hours taught per term
64.5	by degrees held
67	by level of use of alternative instructional methods
80	by length of service in a program
88	by years taught/service
108.5	by level of compensation

classified in the Occupational Program Area with one exception: number or percent of parttime faculty/staff by certification/rank. There were some large differences between the Occupational and Advanced and Professional program areas in the mean usefulness-rating rank order for some of the program characteristics. The program characteristic "ratio

of parttime to fulltime faculty/staff" had a mean usefulness-rating rank of 2 for respondents classified in the Advanced and Professional Program Area and a mean usefulness-rating rank of 40 for respondents classified in the Occupational Program Area. The program characteristic "number or percent of fulltime faculty/staff by certification/rank" had a mean usefulness-rating rank of 8 for respondents classified in the Advanced and Professional Program Area and a mean usefulness-rating rank of 97 for respondents classified in the Occupational Program Area. The program characteristic "number or percent of parttime faculty/staff by degrees held" had a mean usefulness-rating rank of 17 for respondents classified in the Advanced and Professional Program Area and a mean usefulness-rating rank of 64.5 for respondents classified in the Occupational Program Area.

In addition to these program characteristics, respondents classified in the Occupational Program Area rated ratio of faculty/staff to administrative personnel as highly useful and three additional program characteristics related to parttime faculty/staff: productivity ratio, number of course hours taught per term and level of use of alternative instructional methods. Although the rank-order differed slightly, all of the program characteristics rated as most useful by respondents classified in the Occupational Program Area which related to fulltime faculty/staff also appeared in the list for parttime faculty/staff except for four characteristics: level of participation in program decision-making, rate of faculty/staff turnover, number of FTE per term and certification/rank.

Program characteristics related to costs/resources also received high mean usefulness-ratings by respondents classified in the Occupational Program Area (Table IV-21). Three of the top ten program characteristics

Table IV-21

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Occupational Program Area With Ranks

Ranks	Program Characteristics
	Total cost:
7	per total program
27	per program FTE
42	per program unduplicated headcount
	Cost of administration:
39	per total program
92	per program unduplicated headcount
99.5	per program FTE
	Cost of instructional personnel:
9	per total program
33	per program FTE
60.5	per program unduplicated headcount
53.5	Cost of support services per total program
	Cost of materials:
6	per total program
53.5	per program unduplicated headcount
56.5	per program FTE
	Cost of equipment maintenance:
44	per total program
102.5	per program FTE
92	Cost of space utilized per total program
49.5	Number of support staff per total program
	Equipment utilization:
45	per total program
98	per program unduplicated headcount
104.5	per program FTE
77	Space utilization per total program
101	Number of library holdings per total program
82	Cost of program evaluation per total program

ranked by mean usefulness-ratings by respondents classified in this program area related to costs/resources: cost of materials per total program (rank 6), total cost per total program (rank 7) and cost of instructional personnel per total program (rank 9). Two of these, total cost per total program and cost of instructional personnel per total program, were of similar mean usefulness-rating rank for respondents classified in the

Advanced and Professional Program Area (Table IV-15) but "cost of materials per total program" was of rank 19 for respondents classified in the Advanced and Professional Program Area. Respondents classified in the Advanced and Professional Program Area rated eight categories of program characteristics related to costs/resources as highly useful when reported per total program, per program FTE and per program unduplicated headcount (Table IV-15). Respondents classified in the Occupational Program Area rated as highly useful only five such categories: total cost, cost of administration, cost of instructional personnel, cost of materials and equipment utilization. For respondents classified in the Occupational Program Area, the order of emphasis for usefulness in program quality-evaluation decision-making per total program was cost of materials, total cost, cost of instructional personnel, cost of administration, cost of equipment maintenance, equipment utilization, number of support staff, space utilization, cost of support services, cost of program evaluation, cost of space utilized and number of library holdings. This order of emphasis was different from the order of emphasis for respondents classified in the Advanced and Professional Program Area (Table IV-15). Also, the order of emphasis was different by program FTE and by program unduplicated headcount. Cost of program evaluation was the single program characteristic related to costs/resources which appeared in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area which did not appear in the upper quartile for respondents classified in the Advanced and Professional Program Area (Table IV-15).

In contrast to the upper quartile mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area, where

only one of the top ten program characteristics ranked by mean usefulness-ratings related to general information (Table IV-16), four of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in the Occupational Program Area related to general information (Table IV-22): employer opinion of program completers (rank 1), ratings of a program curriculum by program completers (rank 2), clearly stated program objectives (rank 4) and ratings of program facilities/equipment by faculty/staff (rank 10). In order by mean usefulness-rating rank, these were followed by level of demand for program/service by students (rank 11.5), ratings of program facilities/equipment by program completers (rank 11.5), level of demand for program/service in state (rank 15), ratings of a program curriculum by faculty/staff (rank 15), job satisfaction ratings by program completers (rank 18) and ratings of program instructional strategies by program completers (rank 18).

All of the program characteristics related to general information in the upper quartile of mean usefulness-ratings by repondents classified in the Occupational Program Area had a higher rank than the corresponding program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area (Table IV-16) except for program admission requirements, ratings of support services and the three program characteristics which related to student services. Although only one program characteristic (ratings of a program curriculum) rated by all three rater types (faculty/staff, program completers, currently enrolled students) occurred in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area (Table IV-16), five

Table IV-22

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Occupational Program Area With Ranks

Ranks	Program Characteristics
4	Clearly stated program objectives
71	Program admission requirements
	Level of demand for program/service:
11.5	by students
15	in service area
56.5	in state
32	Ratings by accreditation agencies
47	Ratings by certification boards
	Number/types of changes as a result of:
67	program evaluation
75.5	accreditation studies
1	Employer opinion of program completers
18	Job satisfaction ratings by program completers
	Ratings of a program curriculum:
2	by program completers
15	by faculty/staff
90	by currently enrolled students
	Ratings of program facilities/equipment:
10	by faculty/staff
11.5	by program completers
58.5	by currently enrolled students
	Ratings of program instructional strategies:
18	by program completers
22	by faculty/staff
70	by currently enrolled students
	Ratings of program staff:
35	by program completers
49.5	by faculty/staff
67	by currently enrolled students
	Ratings of program administration:
24	by faculty/staff
86	by program completers
	Ratings of support services:
53.5	by faculty/staff
74	by program completers
82	by currently enrolled students
	Ratings of accessibility of student services:
43	by currently enrolled students
60.5	by program completers
	Ratings of ease of use of student services:
63	by currently enrolled students
82	by program completers
	Ratings of usefulness of student services:
58.5	by currently enrolled students
69	by program completers

such program characteristics occurred in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area. For respondents classified in the Advanced and Professional Program Area, ratings by faculty/staff of program instructional strategies, program facilities/equipment, program administration and support services had higher mean usefulness-ratings than ratings by either program completers or currently enrolled students (Table IV-16). Similarly, for respondents classified in the Occupational Program Area, ratings by faculty/staff of three of these four program characteristics had a higher mean usefulness-rating than ratings by either program completers or currently enrolled students. The exception was "ratings of program instructional strategies." For respondents classified in the Occupational Program Area, ratings of this characteristic by program completers had a higher mean usefulness-rating, followed by ratings by faculty/staff, followed by ratings by currently enrolled students. For respondents classified in the Occupational Program Area, as for respondents classified in the Advanced and Professional Program Area, ratings of accessibility, usefulness and ease of use of student services by currently enrolled students had higher mean usefulness-ratings than ratings by other types of raters.

Three other types of characteristics related to general information were rated as highly useful in program quality-evaluation decision-making by respondents classified in the Occupational Program Area: program admission requirements, ratings by accreditation agencies and certification boards and number/types of changes as a result of program evaluation and accreditation studies. Except for "number/types of changes as a result of accreditation studies," these same program

characteristics occurred in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional Program Area (Table IV-16).

In Table IV-23 the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area are arranged into a program quality-evaluation information profile using the same eleven types of information which were used in the program quality-evaluation information profiles for all respondents (Table IV-9) and for respondents classified in the Advanced and Professional Program Area (Table IV-17). A comparison of these tables shows clearly the similarities and differences in the information profiles. Although the order of emphasis varied relating to usefulness of the program characteristic in program quality-evaluation decision-making, the areas of similarity among all three profiles were the information types of need and structure, size, costs, utilization rates, support services, external/internal evaluations and ratings. These areas were similar but not exactly the same. For example, within "costs" the program characteristic "program evaluation" occurred for respondents classified in the Occupational Program Area but not in the previous profiles. Each profile was different from the other two profiles but the areas of differences were the same. The differences were in the information types of entering students, currently enrolled students, faculty/staff and quantitative outputs.

Results-Student Services Area

The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Student Services Area among the four categories of program characteristics

Table IV-23

Information Profile of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Occupational Program Area

Information Type	Program Characteristics Relating to Information Type
Need and structure	Clearly stated program objectives, level of demand for program, program admission requirements
Size	Number enrolling, percent of total college FTE
Costs	Materials, total, instructional personnel, administration, equipment maintenance, support services, program evaluation, space utilized
Utilization rates	Equipment, space
Support services	Number of support staff, number of library holdings
Entering students	Major area of study, type of handicap, career decision status, degree level sought, level of awareness of college's programs and services
Currently enrolled students	Same as for entering students without level of awareness of college's programs and services and adding information on performance (cumulative GPA categories for program-related coursework, number of hours with failing grade, average GPA of students in program)
Faculty/staff	For both fulltime and parttime: ratio of parttime to fulltime; level of preparation (degrees held); level of experience (years taught/service, length of services); level of productivity (average class size, number of students, student contact hours, course hours per term, productivity ratio); level of instructional skill (use of alternative instructional methods); level of compensation. For fulltime: level of preparation (certification/rank); level of productivity (number of FTE per term); rate of turnover; level of participation in program decision-making; ratio to clerical staff and to administrative personnel; ratio of faculty to student support staff
External/internal evaluations	Ratings by accreditation agencies and certification boards, number/type of changes as a result of program evaluation and accreditation studies
Quantitative output	Number or percent: completing; taking and passing state board or licensure exams; by type of license, certificate, or registration received; holding jobs for which trained; by employment status, salary categories, and major area of study; by average time for completion; withdrawing
Ratings	Of program completers by employers; of job satisfaction by program completers; of a program's curriculum, facilities/equipment, instructional strategies, staff and administration by various types of raters; of support services and student services by various types of raters

is reported in Table IV-24. The distribution of the program characteristics related to general information and costs/resources was very similar

Table IV-24

Distribution by Category of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Student Services Area

Category	Number of Characteristics	Percentage of Upper Quartile Characteristics
I. Program Characteristics Relating to Students	33	30.6
II. Program Characteristics Relating to Faculty/Staff	19	17.6
III. Program Characteristics Relating to Costs/Resources	23	21.3
IV. Program Characteristics Relating to General Information	33	30.6
TOTAL	108	100.1

to that reported for respondents classified in the Occupational Program Area (Table IV-18). Respondents classified in the Student Services Area identified approximately 8 percent more program characteristics related to general information and 6 percent fewer related to costs/resources than did respondents classified in the Advanced and Professional Program Area (Table IV-12). The percentage of the program characteristics related to students for respondents classified in the Student Services Area was similar to that for respondents classified in the Advanced and Professional Program Area but was almost 9 percent higher than that for respondents classified in the Occupational Program Area. The percentage of program characteristics related to faculty/staff was approximately

5 percent less than that for respondents classified in the Advanced and Professional Program Area and 8 percent less than that for respondents classified in the Occupational Program Area. The means for these program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Student Services Area ranged from 1.33 to 1.96 (Appendix E).

The program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Student Services Area are presented with ranks in the next four tables. Those related to students are presented in Table IV-25, those related to faculty/staff in Table IV-26, those related to costs/resources in Table IV-27 and those related to general information in Table IV-28.

The top ranked program characteristics by mean usefulness-ratings related to students for respondents classified in the Student Services Area were number or percent of students completing a program (rank 4), number or percent of students withdrawing from a program (rank 7), number or percent of program completers passing state board or licensure exams (rank 9) and number of students enrolling in a program (rank 17) (Table IV-25). Although in different rank order, these were the same as the top ranked characteristics related to students for respondents classified in the Occupational Program Area (Table IV-19). The two program characteristics related to entering students which were in the upper quartile mean usefulness-ratings for both Occupational (Table IV-19) and Advanced and Professional (Table IV-13) respondents appeared again in the upper quartile mean usefulness-ratings for respondents classified in the Student Services Area: number or percent of entering students by major area of study and by degree level sought. There were

Table IV-25

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Student Services Area With Ranks

Ranks	Program Characteristics
17	Number of students enrolling in a program
	Number or percent of entering students:
53.5	by type of handicap
60	by level of awareness of college's programs, services, etc.
61	by major area of study
67.5	by need for various student services
74	by degree level sought
76	by types of developmental or remedial assistance desired
93	by academic skills level as measured by local instruments
103.5	by career decision status
	Number or percent of currently enrolled students:
30	by need for various student services
40	by cumulative GPA categories
55.5	by percent of total college unduplicated headcount in program
57	by major area of study
59	by use of various student services
65.5	by number of hours with failing grade
65.5	by cumulative GPA categories for program-related coursework
75	by average GPA of students in program
81.5	by term GPA categories
87	by career decision status
87	by level of awareness of college's programs, services, etc.
91.5	by type of handicap
107	by percent of total college FTE in program
4	Number or percent of students completing a program
	Number or percent of program completers:
9	passing state board or licensure exams
44	by type of license, certificate or registration received
55.5	taking state board or licensure exams
71	holding jobs for which trained
7	Number or percent of students withdrawing from a program
	Number or percent of students transferring:
	with associate degree;
72	by upper division cumulative term GPA categories
95	completing a four-year degree
108	by enrollment in a four-year institution
94	without associate degree by average GPA
79	Number or percent of native students by average GPA

three program characteristics related to entering students which were in the upper quartile mean usefulness-ratings for respondents classified in both the Student Services Area and the Occupational Program Area: number or percent of entering students by type of handicap, by level of awareness of a college's programs and services and by career decision status. Two program characteristics related to entering students in the upper quartile of mean usefulness-ratings for respondents classified in the Student Services Area were in the upper quartile for respondents classified in the Advanced and Professional Program Area (Table IV-13): number or percent of entering students by types of developmental or remedial assistance desired and by academic skills level as measured by local instruments. One program characteristic related to entering students was uniquely in the upper quartile of mean usefulness-ratings by respondents classified in the Student Services Area: number or percent of entering students by need for various student services.

Only six of the thirteen program characteristics related to currently enrolled students which appeared in the upper quartile of mean usefulness-ratings for respondents classified in the Student Services Area were common to the program characteristics in the upper quartile of mean usefulness-ratings for respondents classified in either the Advanced and Professional or Occupational Program Areas. These six were: number or percent of currently enrolled students by major area of study, by number of hours with failing grade, by cumulative GPA categories for program-related coursework, by average GPA of students in program, by type of handicap and by percent of total college FTE in program.

Other program characteristics related to currently enrolled students which were rated as highly useful by respondents classified in

the Student Services Area were: number or percent of currently enrolled students by need for various student services, by cumulative GPA categories, by percent of total college unduplicated headcount in program, by use of various student services, by term GPA categories, by career decision status and by level of awareness of college's programs and services. All four of the program characteristics related to program completers rated as highly useful by respondents classified in the Student Services Area were similarly rated by respondents in both the Advanced and Professional and Occupational program areas. Respondents classified in the Student Services Area rated five program characteristics related to transfer students as highly useful in program quality-evaluation decision-making: number or percent of native students by average GPA, number or percent of students transferring with an associate degree by upper division cumulative term GPA categories and by completing a four-year degree and by enrollment in a four-year institution and number or percent of students transferring without an associate degree by average GPA. More program characteristics related to grades of students (currently enrolled and transfer) were rated as highly useful in program quality-evaluation decision-making by respondents classified in the Student Services Area than by respondents classified in either the Advanced and Professional or Occupational Program Areas.

None of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in the Student Services Area related to faculty/staff (Table IV-26). However, all thirteen of the program characteristics in the upper quartile of mean usefulness-ratings related to fulltime faculty/staff as identified by respondents classified in the Student Services Area were similarly identified by

Table IV-26

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Student Services Area With Ranks

Ranks	Program Characteristics
59	Ratio of parttime to fulltime faculty/staff
16.5	Ratio of faculty to student support staff
	Number or percent of fulltime faculty/staff:
15	by degrees held
25	by years taught/service
27	by number of course hours taught per term
28	by rate of faculty/staff turnover
31	by number of student contact hours per term
32	by length of service in program
34.5	by number of students per term
34.5	by certification/rank
39	by average class size
43	by productivity ratio
69	by level of participation in program decision-making
80	by number of FTE per term
102	by level of compensation
	Number or percent of parttime faculty/staff:
25.5	by degrees held
77.5	by average class size
87	by number of students per term
96.5	by productivity ratio

respondents classified in the Advanced and Professional (Table IV-14) and Occupational Program Areas (Table IV-20). The only program characteristic rated as highly useful related to fulltime faculty/staff by respondents in the latter two program areas which was not so rated by respondents classified in the Student Services area was number or percent of fulltime faculty/staff by level of use of alternative instructional methods. Only four program characteristics related to parttime faculty/staff were in the upper quartile of mean usefulness-ratings for respondents classified in the Student Services Area: number or percent of parttime faculty/staff by degrees held, by average class size, by

number of students per term and by productivity ratio. Two other program characteristics related to faculty/staff appearing in the upper quartile of mean usefulness-ratings for respondents classified in the Student Services Area were ratio of parttime to fulltime faculty/staff and ratio of faculty to student support staff. Both of these characteristics had mean usefulness-rating ranks roughly comparable to their mean usefulness-rating ranks by respondents classified in the Occupational Program Area.

Only one of the top ten program characteristics ranked by mean usefulness-ratings by respondents classified in the Student Services Area related to costs/resources (Table IV-27): total cost per total program (rank 3). Respondents classified in the Student Services Area rated six categories of program characteristics related to costs/resources as highly useful when reported per total program, per program FTE and per program unduplicated headcount. These six categories were: total cost, cost of administration, cost of instructional personnel, cost of support services, cost of materials and cost of space utilized. The order of emphasis for usefulness in program quality-evaluation decision-making per total program was total cost, cost of instructional personnel, cost of materials, cost of administration, cost of support services, number of support staff, cost of space utilized, cost of equipment maintenance, equipment utilization and space utilization. The order of emphasis was the same per program FTE for the program characteristics to which it applied. The order of emphasis per unduplicated headcount was the same for the program characteristics to which it applied except "cost of support services" was tied with "cost of instructional personnel" for second in rank order. The order of emphasis per total program was

Table IV-27

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Student Services Area With Ranks

Ranks	Program Characteristics
	Total cost:
3	per total program
14	per program FTE
19	per program unduplicated headcount
	Cost of administration:
24	per total program
41.5	per program unduplicated headcount
52	per program FTE
	Cost of instructional personnel:
22.5	per total program
33	per program FTE
37.5	per program unduplicated headcount
	Cost of support services:
26	per total program
37.5	per program unduplicated headcount
70	per program FTE
	Cost of materials:
22.5	per total program
41.5	per program unduplicated headcount
77.5	per program FTE
48.5	Cost of equipment maintenance per total program
	Cost of space utilized:
45.5	per total program
87	per program FTE
87	per program unduplicated headcount
	Number of support staff
33.5	per total program
63.5	per program unduplicated headcount
63.5	Equipment utilization per total program
98	Space utilization per total program

different from the order of emphasis for respondents classified in either the Advanced and Professional (Table IV-15) or the Occupational (Table IV-21) program areas. Number of library holdings, which appeared in the upper quartile of mean usefulness-ratings by respondents classified in the Advanced and Professional and Occupational program areas, did not appear in the upper quartile of mean usefulness-ratings by

respondents classified in the Student Services Area. Neither did cost of program evaluation, which appeared in the upper quartile of mean usefulness-ratings by respondents classified in the Occupational Program Area.

Five of the top ten program characteristics, plus three tied for rank 10, ranked by mean usefulness-ratings for respondents classified in the Student Services Area related to general information (Table IV-28). These were ratings of accessibility of student services by currently enrolled students (rank 1) and by program completers (rank 5.5), ratings of ease of use of student services by currently enrolled students (rank 11) and by program completers (rank 2), ratings of usefulness of student services by currently enrolled students (rank 5.5), level of demand for program/service by students (rank 8) and in service area (rank 11) and employer opinion of program completers (rank 11). Respondents classified in the Student Services Area placed slightly more emphasis on ratings of various aspects of a program by program completers than did respondents classified in the Advanced and Professional (Table IV-16) and Occupational (Table IV-22) program areas. This difference was evident especially in the program characteristic "rating of support services." Rating of the characteristic by program completers had a mean usefulness-rating rank of 20.5 for respondents classified in the Student Services Area and rating of the characteristic by faculty had a rank of 105.5. For respondents classified in the Advanced and Professional Program Area rating of the characteristic by program completers did not appear in the top quartile and rating of the characteristic by faculty had a rank of 43. For respondents classified in the Occupational Program Area, rating of the characteristic by

Table IV-28

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Student Services Area With Ranks

Ranks	Program Characteristics
16	Clearly stated program objectives
47	Program admission requirements
	Level of demand for program/service:
8	by students
11	in service area
67.5	in state
83	Ratings by accreditation agencies
105.5	Ratings by certification boards
	Number/types of changes as a result of:
73	program evaluation
99.5	accreditation studies
11	Employer opinion of program completers
29	Job satisfaction ratings by program completers
18	Ratings of a program curriculum by program completers
	Ratings of program facilities/equipment:
50	by program completers
87	by faculty/staff
87	by currently enrolled students
	Ratings of program instructional strategies:
99.5	by program completers
103.5	by faculty/staff
	Ratings of program staff:
36	by program completers
81.5	by currently enrolled students
91.5	Ratings of program administration by faculty/staff
	Ratings of support services:
20.5	by program completers
20.5	by currently enrolled students
105.5	by faculty/staff
	Ratings of accessibility of student services:
1	by currently enrolled students
5.5	by program completers
53.5	by program leavers
	Ratings of ease of use of student services:
2	by currently enrolled students
11	by program completers
51	by program leavers
	Ratings of usefulness of student services:
5.5	by currently enrolled students
13	by program completers
62	by program leavers
101	by faculty/staff

program completers had a rank of 74 and rating of the characteristic by faculty/staff had a rank of 53.5. Ratings of accessibility, ease of use and usefulness of student services by program leavers were rated as highly useful for program quality-evaluation decision-making by respondents classified in the Student Services Area. Rating of a program characteristic by program leavers did not appear in the upper quartile mean usefulness-ratings for respondents classified in either the Advanced and Professional or Occupational program areas.

In Table IV-29 the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Student Services Area are arranged into a program quality-information profile similar to the program quality-evaluation information profiles for all respondents (Table IV-9) and for respondents classified in the other program areas (Advanced and Professional, Table IV-17; Occupational, Table IV-23). In addition to the eleven types of information used in the other profiles, "Transfer students" was added as an information type in this profile. As in the comparisons of the other profiles, although the order of emphasis varied relating to usefulness of the program characteristic in program quality-evaluation decision-making, the areas of similarity were in the information types of need and structure, size, costs, utilization rates, support services, external/internal evaluations and ratings. Again, these areas were similar but not exactly the same. For example, within "Support services" the program characteristic "number of library holdings" did not appear in this profile as it had in previous profiles. This profile was different from each of the previous profiles in the information types of entering students, currently enrolled students, faculty/staff, quantitative outputs and transfer students.

Table IV-29

Information Profile of Program Charadteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Student Services Area

Information Type	Program Characteristics Relating to Information Type
Need and structure	Level of demand for program, clearly stated program objectives, program admission requirements
Size	Number enrolling, percent of total college unduplicated headcount, percent of total college FTE
Costs	Total, instructional personnel, materials, administration, support services, space utilized, equipment maintenance
Utiliza-tion rates	Equipment, space
Support services	Number of support staff
Entering students	Type of handicap, level of awareness of college's programs and services, major area of study, need for various student services, degree level sought, types of developmental or remedial assistance desired, academic skills level as measured by local instruments, career decision status
Currently enrolled students	Same as entering students without degree level sought and and types of assistance desired and academic skills level by local instruments and adding information on performance (cumulative GPA categories, number of hours with failing grade, cumulative GPA categories for program-related coursework, average GPA of students in program, term GPA categories) and number or percent using student services
Faculty/ staff	For both fulltime and parttime: ratio of parttime to fulltime; level of preparation (degrees held); level of productivity (number of students per term, average class size, productivity ratio). For fulltime: level of preparation (certification/rank); level of experience (years taught/service, length of service); level of productivity (number of course hours taught, student contact hours and FTE per term); rate of turnover; level of participation in program decision-making and level of compensation; ratio of faculty to student support staff.
External/ internal evaluation	Ratings by accreditation agencies and certification boards, number/types of changes as a result of program evaluation and accreditation studies
Quanti-tative outputs	Number or percent: completing; taking and passing state board or licensure exams; by type of license, certificate, or registration received; holding jobs for which trained; withdrawing
Transfer students	Number or percent: with associate degree by upper division cumulative GPA categories, completing a four-year degree, by enrollment in a four-year institution; without associate degree by average GPA; number or percent of native students by average GPA

Table IV-29 Continued

Information Type	Program Characteristics Relating to Information Type
Ratings	Of program completers by employers; of job satisfaction by program completers; of a program's curriculum, facilities/ equipment, instructional strategies, staff and administration by various types of raters; of support services and student services by various types of raters

Results-Developmental Program Area

Although the number of respondents included in this program area was small (N = 5), they represented five different colleges that had a person with primary responsibility in this program area as reflected in a position title such as Chairman of Development Education, Coordinator of Developmental Studies, etc. According to the list of administrators with responsibility for compensatory/developmental education in the the 1981-82 Directory for Florida community colleges, there were very few titles reflecting primary responsibility in this program area (Division of Community Colleges, 1981a, p. 71).

The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Developmental Program Area is reported in Table IV-30. There were 117 instead of 108 program characteristics included because there were 93 with a mean less than or equal to 2.0 and then 24 characteristics with a mean of 2.2. Therefore, these 24 characteristics were included. The means of the usefulness-ratings for these program characteristics ranged from 1.0 to 2.2 (Appendix E). The distribution of the program characteristics was very similar to the distribution reported for respondents classified in the Occupational Program Area (Table IV-18) except for a slightly higher percentage (3.7) of program characteristics related to

Table IV-30

Distribution by Category of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Developmental Program Area

Category	Number of Characteristics	Percentage of Upper Quartile Characteristics
I. Program Characteristics Relating to Students	25	21.4
II. Program Characteristics Relating to Faculty/Staff	28	24.0
III. Program Characteristics Relating to Costs/Resources	29	24.8
IV. Program Characteristics Relating to General Information	35	30.0
TOTAL	117	100.2

costs/resources. Compared to the distribution for respondents classified in the Advanced and Professional Program Area (Table IV-12), this distribution had a higher percentage of program characteristics related to general information and costs/resources and a lower percentage of program characteristics related to students. Compared to the distribution for respondents classified in the Student Services Area (Table IV-24), this distribution had lower percentages of program characteristics related to students and faculty/staff.

The program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Developmental Program Area are presented with ranks in the next four tables. Those related to students are presented in Table IV-31, those related to faculty/staff in Table IV-32, those related to costs/resources in Table IV-33 and those related to general information in Table IV-34.

None of the program characteristics related to students which were in the upper quartile of mean usefulness-ratings for respondents classified in the Developmental Program Area were in the top ten program characteristics ranked by mean usefulness-ratings (Table IV-31). The triad of number of students enrolling, completing and withdrawing from a program, which appeared in the upper quartile of mean usefulness-ratings for respondents classified in all the program areas already discussed, appeared in this program area also (Tables IV-13, IV-19, IV-25). Respondents classified in the Developmental Area rated as highly useful only three program characteristics related to entering students which were rated similarly by respondents classified in the other program areas discussed. These were number or percent of entering students by type of handicap, by academic skills level as measured by local instruments and by types of developmental or remedial assistance desired. They rated as highly useful two other program characteristics related to entering students which did not appear in the upper quartile of mean usefulness-ratings for respondents classified in the other program areas: number or percent of entering students by test anxiety levels and by race classification. Except for the program characteristic "academic skills level as measured by local instruments," respondents classified in the Developmental Program Area rated the same program characteristics as highly useful in relation to currently enrolled students as respondents in the other program areas. For program characteristics related to program completers, they rated as highly useful the same program characteristics as for entering students plus seven others, only three of which were included in the upper quartile of mean usefulness-ratings for respondents classified in any of the other program areas discussed.

Table IV-31

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Developmental Program Area With Ranks

Ranks	Program Characteristics
76.5	Number of students enrolling in a program
	Number or percent of entering students:
47	by type of handicap
47	by academic skills level as measured by local instruments
76.5	by types of developmental or remedial assistance desired
105.5	by test anxiety levels
105.5	by race classification
	Number or percent of currently enrolled students:
47	by type of handicap
105.5	by types of developmental or remedial assistance desired
105.5	by test anxiety levels
105.5	by race classification
19	Number or percent of students completing a program
	Number or percent of program completers:
27	by type of handicap
47	by race classification
47	by level of awareness of college's programs, services, etc.
76.5	by career decision status
76.5	by academic skills level as measured by local instruments
76.5	by types of developmental or remedial assistance desired
76.5	by self-concept categories
76.5	by test anxiety levels
76.5	by citizenship classification
105.5	by employment status
105.5	by time spent in program
105.5	by academic skills level as measured by national instruments
76.5	Number or percent of students withdrawing from a program
105.5	Number or percent of program leavers by test anxiety levels

In addition, number or percent of students withdrawing from a program and number or percent of program leavers were rated as highly useful by respondents classified in this program area.

Only one of the program characteristics related to faculty/staff were in the top ten program characteristics ranked by mean usefulness-

ratings for respondents classified in the Developmental Program Area (Table IV-32): number or percent of fulltime faculty/staff by number of student contact hours per term (rank 4.5). However, all thirteen of the program characteristics in the upper quartile of mean usefulness-ratings related to fulltime faculty/staff as rated by respondents in all the other program areas discussed (Tables IV-14, IV-20, IV-26) were

Table IV-32

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Developmental Program Area With Ranks

Ranks	Program Characteristics
47	Ratio of parttime to fulltime faculty/staff
76.5	Ratio of faculty/staff to clerical staff
105.5	Ratio of faculty/staff to administrative personnel
	Number or percent of fulltime faculty/staff:
4.5	by number of student contact hours per term
12.5	by degrees held
27	by average class size
27	by length of service in program
27	by certification/rank
47	by number of students per term
47	by years taught/service
47	by number of FTE per term
47	by type of language spoken
76.5	by number of course hours taught per term
76.5	by productivity ratio
76.5	by rate of faculty/staff turnover
76.5	by level of participation in program decision-making
76.5	by level of compensation
	Number or percent of parttime faculty/staff:
12.5	by number of student contact hours per term
47	by average class size
76.5	by degrees held
76.5	by number of students per term
76.5	by years taught/service
76.5	by length of service in a program
76.5	by certification/rank
76.5	by number of FTE per term
76.5	by type of language spoken
105.5	by productivity rate
105.5	by level of compensation

rated similarly by respondents classified in this program area with one additional program characteristic: number or percent of fulltime faculty/staff by type of language spoken. For program characteristics related to parttime faculty/staff, respondents classified in this program area rated as highly useful program characteristics similarly rated by respondents in the other program areas discussed previously with the additional characteristics of number of FTE per term and type of language spoken. Respondents classified in this program area rated as highly useful also ratio of parttime to fulltime faculty/staff, ratio of faculty/staff to clerical staff and ratio of faculty/staff to administrative personnel.

Four of the top ten program characteristics ranked by mean usefulness-ratings for respondents classified in the Developmental Program Area related to costs/resources (Table IV-33). These were total cost per total program (rank 1.5), cost of instructional personnel (rank 1.5), cost of materials per total program (rank 4.5) and cost of equipment maintenance per total program (rank 4.5). In rank-order by mean usefulness-rating, these were followed by cost of administration per total program (rank 12.5), cost of support services per total program (rank 12.5) and cost of needs assessment or other necessary research per total program (rank 12.5). Like respondents classified in the Occupational Program Area (Table IV-21), respondents classified in the Developmental Program Area rated as highly useful in program quality-evaluation decision-making cost of program evaluation per total program. The order of emphasis for usefulness in program quality-evaluation decision-making per total program was total cost and cost of instructional personnel, cost of materials and cost of equipment maintenance, cost of

Table IV-33

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Developmental Program Area With Ranks

Ranks	Program Characteristics
	Total cost:
1.5	per total program
76.5	per program FTE
76.5	per program unduplicated headcount
	Cost of administration:
12.5	per total program
76.5	per program FTE
76.5	per program unduplicated headcount
	Cost of instructional personnel:
1.5	per total program
76.5	per program FTE
105.5	per program unduplicated headcount
	Cost of support services:
12.5	per total program
105.5	per program FTE
105.5	per program unduplicated headcount
	Cost of materials:
4.5	per total program
76.5	per program FTE
76.5	per program unduplicated headcount
	Cost of equipment maintenance:
4.5	per total program
76.5	per program FTE
76.5	per program unduplicated headcount
27	Cost of space utilized per total program
	Number of support staff:
27	per total program
76.5	per program FTE
105.5	per program unduplicated headcount
	Equipment utilization:
76.5	per total program
76.5	per program FTE
105.5	per program unduplicated headcount
105.5	Space utilization per program FTE
47	Cost of program evaluation per total program
	Cost of needs assessment or other necessary research:
12.5	per total program
105.5	per program FTE

administration, cost of support services, cost of needs assessment or other necessary research, cost of space utilized and number of support

staff, cost of program evaluation, equipment utilization and space utilization.

There were five characteristics related to general information which appeared in the upper quartile of mean usefulness-ratings by respondents classified in the other program areas discussed previously (Tables IV-16, IV-22, IV-28) that did not appear in the upper quartile of mean usefulness-ratings by respondents classified in the Developmental Program Area (Table IV-34). These five characteristics were employer opinion of program completers, program admission requirements, ratings by accreditation agencies, ratings by certification boards and job satisfaction ratings by program completers. Nine program characteristics rated by all three rater types occurred in the upper quartile of mean usefulness-ratings by respondents classified in the Developmental Program Area. Clearly stated program objectives had the highest rank by mean usefulness-ratings for program characteristics related to general information by respondents classified in this program area. This was followed by seven characteristics tied with a rank of 12.5. These were level of demand for program/service in service area, number/types of changes as a result of program evaluation, ratings of a program curriculum by program completers, ratings of program instructional strategies by program completers and by faculty/staff, ratings of a program staff by faculty/staff and ratings of support services by currently enrolled students. One characteristic occurred in the upper quartile of mean usefulness-ratings for characteristics related to general information for respondents classified in this program area which had not appeared in the upper quartile for respondents classified in the other program areas discussed: number of alternative educational methods offered.

Table IV-34

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Developmental Program Area With Ranks

Ranks	Program Characteristics
4.5	Clearly stated program objectives
	Level of demand for program/service:
12.5	in service area
27	by students
47	in nation
47	in state
	Number/types of changes as a result of:
12.5	program evaluation
47	accreditation studies
	Ratings of a program curriculum:
12.5	by program completers
27	by faculty/staff
47	by currently enrolled students
	Ratings of program facilities/equipment:
27	by faculty/staff
47	by program completers
47	by currently enrolled students
	Ratings of program instructional strategies:
12.5	by faculty/staff
12.5	by program completers
47	by currently enrolled students
	Ratings of program staff:
12.5	by faculty/staff
27	by program completers
27	by currently enrolled students
	Ratings of program administration:
27	by program completers
27	by faculty/staff
27	by currently enrolled students
	Ratings of support services:
12.5	by currently enrolled students
27	by program completers
105.5	by faculty/staff
	Ratings of accessibility of student services:
47	by currently enrolled students
47	by program completers
105.5	by faculty/staff
	Ratings of ease of use of student services:
47	by currently enrolled students
47	by program completers
105.5	by faculty/staff
	Ratings of usefulness of student services:
47	by currently enrolled students
47	by program completers
105.5	by faculty/staff
105.5	Number of alternative educational methods offered

In Table IV-35 the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Developmental Program Area are arranged into a program quality-evaluation information profile using the same eleven types of information which were used in the program quality-evaluation information profiles for all respondents (Table IV-9) and for respondents classified in the Advanced and Professional (Table IV-17) and Occupational (Table IV-23) program areas. Comparison of this profile with the others revealed only two areas of similarity: the information types of utilization rates and support services. There were differences in all the other information types in this profile when compared with the profiles for respondents classified in the other program areas.

Results-Community Instructional Services

The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Community Instructional Services Program Area is reported in Table IV-36. There were 109 instead of 108 program characteristics identified in the upper quartile because three were tied for rank 108. The means of the usefulness-ratings for these program characteristics ranged from 1.38 to 2.48 (Appendix E). Compared to the distribution of program characteristics for respondents classified in the other program areas (Tables IV-12, IV-18, IV-24, IV-30), respondents classified in the Community Instructional Services Program Area identified from ten to almost twenty percent more program characteristics related to general information. This distribution had the lowest percentages of program characteristics related to students and costs/resources of any of the other distributions discussed.

Table IV-35

Information Profile of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Developmental Program Area

Information Type	Program Characteristics Relating to Information Type
Need and structure	Clearly stated program objectives, level of demand for program, number of alternative educational methods offered
Size	Number enrolling
Costs	Total and instructional personnel; materials and equipment maintenance; administration, support services, needs assessment and other necessary research; space utilized; program evaluation
Utiliza-tion rates	Equipment, space
Support services	Number of support staff
Entering students	Type of handicap, academic skills level as measured by local instruments, types of developmental/remedial assistance desired, test anxiety level, race classification
Currently enrolled students	Same as for entering students without academic skills level as measured by local instruments
Faculty/ staff	For both fulltime and parttime: ratio of parttime to fulltime; level of preparation (degrees held, certification/ rank); level of experience (length of service in program, years taught/service); level of productivity (number of students and student contact hours and FTE per term, average class size, productivity ratio); type of language spoken; level of compensation. For fulltime: number of course hours taught per term; rate of turnover; level of participation in program decision-making; ratio to clerical staff and to administrative personnel
External/ internal evaluation	Number/types of changes as a result of program evaluation and accreditation studies
Quanti-tative outputs	Number or percent: completing; by type of handicap, race and citizenship classification, career decision status, self-concept categories, test anxiety levels, employment status and time spent in program and types of developmental/ remedial assistance desired; by academic skills level as measured by local and national instruments; withdrawing; leavers by test anxiety levels
Ratings	Of a program's curriculum, facilities/equipment, instructional strategies, staff and administration by various types of raters; of support services and student services by various types or raters

Table IV-36

Distribution by Category of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Community Instructional Services Program Area

	Category	Number of Characteristics	Percentage of Upper Quartile Characteristics
I.	Program Characteristics Relating to Students	21	19.3
II.	Program Characteristics Relating to Faculty/Staff	22	20.2
III.	Program Characteristics Relating to Costs/Resources	21	19.3
IV.	Program Characteristics Relating to General Information	45	41.5
	TOTAL	109	100.1

The program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Community Instructional Services Program Area are presented with ranks in the next four tables. Those related to students are reported in Table IV-37, those related to faculty/staff in Table IV-38, those related to costs/resources in Table IV-39 and those related to general information in Table IV-40.

For the program characteristics related to students (Table IV-37), the three program characteristics with the highest ranks by mean usefulness-ratings for respondents classified in this program area were the familiar triad of number of students enrolling in a program (rank 3), number or percent of students completing a program (rank 13) and number or percent of students withdrawing from a program (rank 16). Respondents classified in the Community Instructional Services Area rated as highly

Table IV-37

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Community Instructional Services Program Area With Ranks

Ranks	Program Characteristics
3	Number of students enrolling in a program
	Number or percent of entering students:
67.5	by type of handicap
80	by level of awareness of college's programs, services, etc.
87.5	by career decision status
99.5	by employment status
108	by age classification
108	holding jobs for which trained
	Number or percent of currently enrolled students:
80	by percent of total college unduplicated headcount in program
87.5	by type of handicap
105	by level of awareness of college's programs, services, etc.
13	Number or percent of students completing a program
	Number or percent of program completers:
23	passing state board or licensure exams
37	taking state board or licensure exams
42	by employment status
71	by type of license, certificate or registration received
75.5	holding jobs for which trained
87.5	by time spent in program
93.5	by average time taken for completion of a program
99.5	by career decision status
16	Number or percent of students withdrawing from a program
67.5	Number or percent of program leavers by employment status

useful only three program characteristics related to entering students which were rated similarly by respondents classified in the other program areas discussed (Tables IV-13, IV-19, IV-25, IV-31). These were number or percent of entering students by type of handicap, by level of awareness of college's programs and services and by career decision status. They rated as highly useful three other program characteristics related to entering students which did not appear in the upper quartile

mean usefulness-ratings of program characteristics related to entering students for respondents classified in the other program areas. These three characteristics were number or percent of entering students by employment status, by age classification and holding jobs for which trained. Only three program characteristics related to currently enrolled students appeared in the upper quartile of mean usefulness-ratings for respondents classified in this program area. These were number or percent of currently enrolled students by percent of total college unduplicated headcount in program, by type of handicap and by level of awareness of college's programs and services. Four of the program characteristics related to program completers rated as highly useful by respondents classified in the Community Instructional Services Program Area were similarly rated by respondents in the Advanced and Professional, Occupational and Student Services program areas. These were number or percent of program completers passing state board or licensure exams; taking state board or licensure exams; by type of license, certificate or registration received and holding jobs for which trained. Four other program characteristics related to program completers rated as highly useful by respondents in this program area were number or percent of program completers by employment status, by time spent in program, by average time taken for completion of a program and by career decision status. All of these were rated as highly useful by respondents classified in one or more of the other program areas. One program characteristic related to program leavers occurred in the upper quartile of mean usefulness-ratings for respondents classified in the Community Instructional Services Program Area which did not appear in the upper quartile of mean usefulness-ratings for the other program areas discussed previously: number or

percent of program leavers by employment status.

For respondents classified in the Community Instructional Services Program Area, only eight characteristics related to fulltime faculty/staff but fourteen characteristics related to parttime faculty/staff appeared in the upper quartile of mean usefulness-ratings (Table IV-38). All of the program characteristics related to fulltime and parttime faculty/staff except two have appeared, although in different rank order, in the upper quartile mean usefulness-ratings for respondents classified in one or more of the other program areas discussed previously (Tables

Table IV-38

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Community Instructional Services Program Area With Ranks

Ranks	Program Characteristics
	Number or percent of fulltime faculty/staff:
39	by average class size
56.5	by number of student contact hours per term
56.5	by productivity ratio
64	by degrees held
64	by number of students per term
64	by years taught/service
82	by level of compensation
95	by rate of faculty/staff turnover
	Number or percent of parttime faculty/staff:
11	by years taught/service
18.5	by average class size
25.5	by degrees held
29.5	by productivity ratio
29.5	by length of service in a program
42	by number of students per term
48.5	by number of student contact hours per term
48.5	by level of compensation
59.5	by rate of faculty/staff turnover
62	by certification/rank
75.5	by level of public service
99.5	by level of use of alternative instructional methods
99.5	by number of course hours taught per term
105	by level of participation in program decision-making

IV-14, IV-20, IV-26, IV-32). The two exceptions were number or percent of parttime faculty/staff by level of public service and by level of participation in program decision-making. In comparison with the ranks of the mean usefulness-ratings by respondents classified in the other program areas, the ranks of the program characteristics related to part-time faculty/staff for respondents classified in this program area were higher than the ranks of the program characteristics related to fulltime faculty/staff.

The program characteristic with the highest mean usefulness-rating by respondents classified in the Community Instructional Services Program Area was total cost per total program (Table IV-39). The order of emphasis for usefulness in program quality-evaluation decision-making for these characteristics related to costs/resources per total program was total cost, cost of instructional personnel, cost of materials, cost of administration, number of support staff, cost of equipment maintenance, cost of space utilized, cost of needs assessments or other necessary research, space utilization and cost of program evaluation. The program characteristic "equipment utilization," which appeared in the upper quartile mean usefulness-ratings for respondents classified in all the other program areas (Tables IV-15, IV-21, IV-27, IV-33), did not appear in the upper quartile mean usefulness-ratings for respondents classified in this program area. Also, similar to respondents classified in the Student Services Area and Developmental Program Area, respondents classified in this program area did not rate number of library holdings as highly useful. They did rate as highly useful cost of program evaluation and cost of needs assessment or other necessary research as did the respondents classified in the Developmental Program Area. Respondents classified

Table IV-39

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Community Instructional Services Program Area With Ranks

Ranks	Program Characteristics
	Total cost:
1	per total program
29.5	per program unduplicated headcount
37	per program FTE
	Cost of administration:
18.5	per total program
71	per program FTE
	Cost of instructional personnel:
8.5	per total program
33.5	per program unduplicated headcount
45.5	per program FTE
	Cost of support services:
25.5	per total program
51	per program FTE
67.5	per program unduplicated headcount
	Cost of materials:
11	per total program
37	per program FTE
42	per program unduplicated headcount
48.5	Cost of equipment maintenance per total program
	Cost of space utilized:
59.5	per total program
105	per program FTE
33.5	Number of support staff per total program
87.5	Space utilization per total program
59.5	Cost of needs assessments or other necessary research per total program
99.5	Cost of program evaluation per total program

in the Occupational Program Area rated cost of program evaluation as highly useful also.

Six of the top ten program characteristics, plus one tied for rank 10, ranked by mean usefulness-ratings by respondents classified in the Community Instructional Services Program Area related to general information (Table IV-40). These were clearly stated program objectives

Table IV-40

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Community Instructional Services Program Area With Ranks

Ranks	Program Characteristics
2	Clearly stated program objectives
87.5	Program admission requirements
	Level of demand for program/service:
4.5	in service area
4.5	by students
87.5	in state
71	Ratings by accreditation agencies
29.5	Ratings by certification boards
33.5	Number/types of changes as a result of program evaluation
11	Employer opinion of program completers
53.5	Employer opinion of program non-completers
14.5	Job satisfaction ratings by program completers
99.5	Job satisfaction ratings by non-completers
	Ratings of a program curriculum:
7	by program completers
14.5	by faculty/staff
25.5	by currently enrolled students
75.5	by community (general)
108	by program leavers
	Ratings of program facilities/equipment:
8.5	by faculty/staff
18.5	by program completers
33.5	by currently enrolled students
75.5	by program leavers
99.5	by community (general)
	Ratings of program instructional strategies:
6	by faculty/staff
21.5	by program completers
53.5	by currently enrolled students
99.5	by program leavers
	Ratings of program staff:
21.5	by faculty/staff
48.5	by program completers
59.5	by currently enrolled students
87.5	by program leavers
	Ratings of program administration:
18.5	by faculty/staff
75.5	by currently enrolled students
	Ratings of support services:
25.5	by faculty/staff
87.5	by currently enrolled students

Table IV-40 Continued

Ranks	Program Characteristics
	Ratings of accessibility of student services:
42	by currently enrolled students
53.5	by faculty/staff
67.5	by program completers
87.5	by program leavers
	Ratings of ease of use of student services:
42	by currently enrolled students
53.5	by faculty/staff
75.5	by program completers
87.5	by program leavers
	Ratings of usefulness of student services:
45.5	by faculty/staff
80	by currently enrolled students
93.5	by program completers

(rank 2), level of demand for program/service in service area (rank 4.5) and by students (rank 4.5), ratings of program instructional strategies by faculty/staff (rank 6), ratings of a program curriculum by program completers (rank 7), ratings of program facilities/equipment by faculty/staff (rank 8) and employer opinion of program completers (rank 11). For respondents classified in this program area, ratings of a program curriculum and of program facilities/equipment were rated as highly useful for five types of raters: program completers, faculty/staff, currently enrolled students, the community (general) and program leavers. For program instructional strategies, program staff, accessibility of student services and ease of use of student services, ratings by program leavers were rated as highly useful by respondents in this program area. Ratings of these characteristics by program completers, faculty/staff and currently enrolled students were rated as highly useful also by respondents classified in this program area. Two other characteristics related to program non-completers were rated as highly useful by respondents

classified in this program area. These were employer opinion of program non-completers and job satisfaction ratings by non-completers. Ratings of program non-completers and by program non-completers and ratings by the community (general) did not appear in the upper quartile of mean usefulness-ratings for respondents classified in the other program areas discussed (Tables IV-16, IV-22, IV-28, IV-34). Also, the rating of any aspect of a program by program leavers did not appear in the upper quartile of mean usefulness-ratings by respondents classified in the other program areas except for respondents classified in the Student Services Area. They rated ratings of various aspects of student services by program leavers as highly useful (Table IV-28).

In Table IV-41, the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in the Community Instructional Services Program Area are arranged into a program quality-evaluation information profile using the same eleven types of information which were used in the program quality-evaluation information profiles for all respondents (Table IV-9) and for respondents classified in the Advanced and Professional (Table IV-17), Occupational (Table IV-23) and Developmental (Table IV-35) program areas. Comparison of this information profile with the other information profiles revealed few areas of similarity. The information type of need and structure was the same as that for respondents classified in all the other program areas except the Developmental Program Area. The information type of support services was the same as that for respondents classified in the Student Services Area (Table IV-29) and Developmental Program Area (Table IV-35). The information type of external/internal evaluations was the same as that for respondents classified in the Advanced and Professional Program

Table IV-41

Information Profile of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Respondents Classified in the Community Instructional Services Program Area

Information Type	Program Characteristics Relating to Information Type
Need and structure	Clearly stated program objectives, level of demand for program, program admission requirements
Size	Number enrolling, percent of total college unduplicated headcount
Costs	Total, instructional personnel, materials, administration, equipment maintenance, support services, space utilized, needs assessments or other necessary research, program evaluation.
Utilization rates	Space
Support services	Number of support staff
Entering students	Type of handicap, level of awareness of college's programs and services, career decision and employment status, age classification, holding jobs for which trained
Currently enrolled students	Type of handicap, level of awareness of college's programs and services
Faculty/staff	For both fulltime and parttime: level of preparation (degrees held); level of experience (years taught/service); level of productivity (average class size, number of students and student contact hours per term, productivity ratio); level of compensation; rate of faculty/staff turnover. For parttime: level of preparation (certification/rank); level of experience (length of service in program); level of productivity (number of course hours taught per term); level of instructional skill (use of alternative instructional methods); level of public service; level of participation in program decision-making
External/internal evaluations	Ratings by accreditation agencies and certification boards, number/types of changes as a result of program evaluation
Quantitative outputs	Number or percent: completing; taking and passing state board or licensure exams; by employment and career decision status; by type of license, certificate or registration received; holding jobs for which trained; by time spent in program and average time taken for completion; withdrawing; program leavers by employment status
Ratings	Of program completers and non-completers by employers; of job satisfaction by program completers and non-completers; of a program's curriculum, facilities/equipment, instructional strategies, staff and administration by various types of raters; of support services and student services by various types of raters

Area. Other than these few similarities, all the other areas of information types for this information profile were different from those of respondents classified in the other program areas.

Results for Administrative Areas

The preceding discussion presented the data for respondents classified into five program areas which was one of the many ways of analyzing the data. Analysis of the data was performed also for respondents classified into five administrative areas according to reported position titles. These five administrative areas were general administration, academic affairs, student affairs, community instructional services and business affairs. The distribution of respondents among these areas is reported in Table IV-2. The position codes which are included in each of these areas are listed in Appendix A. In addition, an analysis was done for the position title "president" (N = 13) although respondents with this position title were included in the "general administration" area.

Mean usefulness-ratings were calculated for each program characteristic in the questionnaire for each of these administrative areas. Using these means, ranks were calculated for the program characteristics. These ranks, with the corresponding means, are reported in Appendix F. Spearman rank-order correlation coefficients were calculated between each administrative area and the five program areas for the program characteristics ranked by mean usefulness-ratings in the upper quartile of mean usefulness-ratings by all respondents. These correlation coefficients are presented in Table IV-42.

For the administrative areas of General Administration and Business Affairs, no respondents classified in these administrative areas were included in any of the five program areas. For the administrative area

of Academic Affairs, respondents classified in this area were included in the Advanced and Professional, Occupational and Developmental program areas. For the administrative areas of Student Affairs and Community Instructional Services, the same respondents were included in the corresponding program areas of Student Services and Community Instructional Services. None of the presidents were included in any of the five program areas. However, as mentioned previously, the presidents were included in the General Administration administrative area.

Table IV-42 shows that there was the highest degree of similarity in the upper quartile ranked mean usefulness-ratings by respondents classified in the General Administration area and respondents classified in the Occupational Program Area and the lowest degree of similarity with

Table IV-42

Spearman Rank-Order Correlation Coefficients for the Upper Quartile of Mean Usefulness-Ratings by All Respondents for Administrative Areas With Program Areas

	Advan. & Prof.	Occup.	Stu. Serv.	Develop.	Comm. Instr. Serv.
General Administration	.62	.74	.71	.32	.61
Academic Affairs	.76	.91	.59	.42	.62
Student Affairs	.47	.50	1.00*	.25	.33
Community Instructional Services	.35	.64	.33	.43	1.00*
Business Affairs	.47	.55	.60	.31	.45
Presidents	.35	.47	.48	.28	.47

*There was a correlation coefficient of 1.00 between administrative area and program area because the respondents were the same in both for Student Services and Community Instructional Services.

respondents classified in the Developmental Program Area. For respondents classified in the Academic Affairs administrative area, the highest and lowest degrees of similarity were with the same program areas as cited for the General Administration area. For respondents classified in the Business Affairs administrative area, the highest degree of similarity was with respondents classified in the Student Services area and the lowest degree of similarity was with respondents classified in the Developmental Program Area. For the responding presidents, the highest and lowest degrees of similarity with respondents classified in the program areas were the same as for respondents classified in the Business Affairs administrative area.

The distribution of the program characteristics in the upper quartile of mean usefulness-ratings by respondents classified in each of these administrative areas is presented in Table IV-43. The number of program characteristics in an administrative area varied due to mean usefulness-ratings of some program characteristics being tied for rank 108. This table shows that Presidents rated a higher percentage of program characteristics related to students as useful in program quality-evaluation decision-making than respondents classified in any other administrative area. Also, the pattern of distribution of the program characteristics among the four categories for the presidents was much different than the distribution pattern of any of the other administrative areas. It was different also from the distribution of any of the program areas (Tables IV-2, IV-18, IV-24, IV-30, IV-36). This was probably one of the factors involved in producing the low correlations of upper quartile mean usefulness-ratings by presidents with all the program areas (Table IV-42). Respondents classified in the Community Instructional Services administrative

Table IV-43

Number and Percentage of Program Characteristics in the Upper Quartile of Mean Usefulness-Ratings by Category of Program Characteristics for Respondents Classified in the Administrative Areas

Category	Administrative Areas											
	General Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents	
	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
I. Program Characteristics Relating to Students	31	28.7	23	21.3	33	30.6	21	19.3	29	27.1	43	38.4
II. Program Characteristics Relating to Faculty/Staff	20	18.5	27	25.0	19	17.6	22	20.2	23	21.5	11	9.8
III. Program Characteristics Relating to Costs/Resources	24	22.2	24	22.2	23	21.3	21	19.3	26	24.3	21	18.8
IV. Program Characteristics Relating to General Information	33	20.6	34	31.5	33	30.6	45	41.5	29	27.1	37	33.0
	108	100.0	108	100.0	108	100.1	109	100.1	107	100.0	112	100.0

area (which were the same as respondents classified in the Community Instructional Services Program Area) identified a much higher percentage of program characteristics in the general information category than any other administrative area. Respondents classified in the administrative area of Student Affairs identified equal percentages of program characteristics in the categories of students and general information. The same was true of respondents classified in the administrative area of Business Affairs. Respondents classified in the administrative area of Academic Affairs had a distribution very similar to respondents classified in the Occupational Program Area (Table IV-18). Also, they had the highest percentage of program characteristics in the category of faculty/staff of any administrative area. Respondents classified in the General Administration area had the lowest percentage of program characteristics in the category of general information of all the administrative areas. Respondents classified in the Business Affairs administrative area appeared to have the most even distribution of program characteristics across the four categories. Also, they had the highest percentage of program characteristics in the category of costs/resources of any of the administrative areas.

Spearman rank-order correlation coefficients were calculated between each administrative area for the program characteristics ranked by mean usefulness-ratings in the upper quartile of mean usefulness-ratings by all respondents. These correlations are presented in Table IV-44. The highest degree of similarity in the rank-ordered mean usefulness-ratings was between respondents classified in the General Administration area and respondents classified in the Academic Affairs area (.86). The next highest was between respondents classified in the General Administration

Table IV-44

Spearman Rank-Order Correlation Coefficients for the Upper Quartile of Mean Usefulness-Ratings by All Respondents Between Respondents Classified in the Administrative Areas

	Gen. Admin.	Acad. Aff.	Stu. Aff.	Bus. Aff.	Comm. Instr. Serv.	Pres.
Gen. Admin.	1.00	.86	.71	.61	.61	.72
Acad. Aff.		1.00	.59	.58	.62	.57
Stud. Aff.			1.00	.60	.33	.48
Bus. Aff.				1.00	.45	.44
Comm. Instr. Serv.					1.00	.47
Presidents						1.00

area and the Presidents, who were included in the General Administration area. The only other correlation of 70 or above was between respondents classified in the General Administration area and respondents classified in the Student Affairs area (.71). The lowest degree of similarity was between respondents classified in the Student Affairs administrative area and respondents classified in the Community Instructional Services administrative area (.33).

The preceding suggests that there were considerable differences among respondents, as they were classified according to administrative areas and program areas, in their perceptions of the usefulness of various program characteristics in making program quality-evaluation decisions. The differences and similarities in the program characteristics in the upper quartile of mean usefulness-ratings for each of the administrative areas were not discussed in this report. However, tables presenting the program characteristics for each category of program characteristics with ranks for each administrative area are presented in Appendix G.

Results for Selected Personal and Institutional Characteristics

In addition to analyzing the data from this project by respondents classified into the program or service area with which they were primarily associated and into the administrative area within which they held their positions, an analysis was done for respondents classified according to selected personal characteristics (degree level, sex, years in present position, etc.), according to selected general characteristics of the institution within which the respondents were employed (size of college, whether designated area vocational school or not, size of each program area by percent of total college FTE, etc.) and according to several types of opinions requested on the project questionnaire (time spent in program quality-evaluation decision-making, level of experience in program quality-evaluation decision-making, etc.). These classifications were listed and described in Appendix A.

For these classifications only the Spearman rank-order correlation coefficients for the program characteristics ranked by the mean usefulness-ratings in the upper quartile of mean usefulness-ratings by all respondents were reported.

The Spearman rank-order correlation coefficients calculated for the program characteristics ranked by mean usefulness-ratings in the upper quartile of mean usefulness-ratings by all respondents for respondents classified by level of degree, sex, years at present college, years in present position, years in community college education and years in education other than community college education are reported in Table IV-45. The number of respondents in each of these classifications was reported in Table IV-1. The degree of similarity in the rank-ordered program characteristics was very high for all of the respondents

Table IV-45

Spearman Rank-Order Correlation Coefficients for the Upper Quartile of Mean Usefulness-Ratings by All Respondents Classified by Personal Characteristics

	Degree				Sex		Yrs. Pres. Coll.			
	(1)	(2)	(3)	(4)	M	F	(1)	(2)	(3)	(4)
Degree										
(1) Bach.	1.00	.67	.68	.69	.76	.68	.77	.76	.71	.65
(2) Mast.		1.00	.61	.84	.90	.91	.89	.94	.89	.81
(3) Spec.			1.00	.62	.71	.62	.67	.68	.69	.62
(4) Doct.				1.00	.96	.82	.91	.87	.91	.91
Sex										
Male					1.00	.81	.93	.92	.93	.91
Female						1.00	.86	.89	.86	.74
Yrs. Pres. Coll.										
(1) 5 or less							1.00	.88	.87	.79
(2) 6-10								1.00	.87	.82
(3) 11-15									1.00	.81
(4) Over 15										1.00
Yrs. Pres. Pos.										
(1) 2 or less										
(2) 3-5										
(3) 6-10										
(4) Over 10										
Yrs. Comm. Coll. Ed.										
(1) 6 or less										
(2) 7-11										
(3) 12-15										
(4) Over 15										
Yrs. Ed. Oth. Comm. Coll.										
(1) None										
(2) 1-5										
(3) 6-10										
(4) Over 10										

Table IV-45-Extended

Yrs. Pres. Pos.				Yrs. Comm. Coll. Ed.				Yrs. Ed. Oth. Comm. Coll.				
(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)	
												Degree
.75	.70	.72	.66	.76	.73	.74	.66	.75	.78	.68	.69	(1) Bach.
.89	.86	.91	.80	.91	.93	.86	.84	.89	.83	.90	.89	(2) Mast.
.74	.54	.66	.66	.65	.69	.66	.64	.66	.70	.56	.68	(3) Spec.
.88	.89	.88	.90	.88	.89	.90	.93	.86	.92	.92	.87	(4) Doct.
												Sex
.90	.91	.91	.90	.92	.92	.91	.93	.89	.92	.93	.90	Male
.88	.80	.85	.79	.86	.89	.85	.77	.85	.81	.82	.88	Female
												Yrs. Pres. Coll.
.92	.88	.85	.82	.95	.90	.88	.83	.89	.89	.89	.85	(1) 5 or less
.90	.87	.83	.81	.90	.96	.87	.84	.89	.86	.89	.90	(2) 6-10
.89	.88	.85	.89	.87	.89	.95	.85	.83	.87	.88	.91	(3) 11-15
.79	.82	.87	.87	.78	.82	.79	.98	.85	.87	.85	.80	(4) Over 15
												Yrs. Pres. Pos.
1.00	.77	.84	.80	.91	.90	.87	.82	.88	.88	.84	.87	(1) 2 or less
	1.00	.82	.80	.88	.86	.87	.83	.85	.85	.91	.83	(2) 3-5
		1.00	.79	.84	.94	.83	.88	.88	.85	.87	.88	(3) 6-10
			1.00	.80	.80	.88	.90	.78	.85	.85	.86	(4) Over 10
												Yrs. Comm. Coll. Ed.
				1.00	.89	.84	.82	.87	.86	.90	.86	(1) 6 or less
					1.00	.86	.84	.89	.86	.89	.90	(2) 7-11
						1.00	.81	.83	.88	.86	.90	(3) 12-15
							1.00	.86	.88	.86	.84	(4) Over 15
												Yrs. Ed. Oth. Comm. Coll.
								1.00	.86	.84	.79	(1) None
									1.00	.83	.80	(2) 1-5
										1.00	.84	(3) 6-10
											1.00	(4) Over 10

Table IV-46

Spearman Rank-Order Correlation Coefficients for the Upper Quartile of Mean Usefulness-Ratings by All Respondents Classified by Institutional Characteristics

	Market Region					Area Vo-Tech	Not Area Vo-Tech	College Size		
	NW	NE	CENT.	SE	SW			LG	MED	SM
Market Region										
Northwest	1.00	.77	.74	.75	.74	.85	.80	.77	.80	.88
Northeast		1.00	.83	.83	.78	.94	.86	.89	.90	.76
Central			1.00	.82	.78	.90	.88	.88	.91	.74
Southeast				1.00	.79	.85	.95	.95	.80	.79
Southwest					1.00	.84	.88	.86	.80	.83
Area Vo-Tech						1.00	.87	.92	.91	.85
Not Area Vo-Tech							1.00	.96	.88	.82
College Size										
Large								1.00	.83	.79
Medium									1.00	.75
Small										1.00
Program Size										
Advan. & Prof.										
Large										
Medium										
Small										
Occup.										
Large										
Medium										
Small										
Develop.										
Large										
Medium										
Small										
Comm. Instr. Serv.										
Large										
Medium										
Small										

Table IV-46-Extended

Program Size												
Advan. & Prof.			Occup.			Develop.			Comm. Instr. Serv.			
LG	MED	SM	LG	MED	SM	LG	MED	SM	LG	MED	SM	
												Market Region
.77	.83	.82	.82	.79	.82	.78	.87	.75	.85	.83	.79	Northwest
.84	.84	.92	.92	.84	.86	.94	.86	.83	.92	.88	.79	Northeast
.87	.77	.91	.90	.85	.84	.85	.92	.82	.91	.92	.75	Central
.93	.86	.83	.84	.94	.88	.83	.86	.96	.88	.81	.82	Southeast
.87	.77	.84	.84	.90	.78	.80	.85	.86	.84	.88	.77	Southwest
.86	.85	.98	.99	.88	.84	.94	.93	.86	.97	.94	.81	Area Vo-Tech
.97	.88	.86	.85	.96	.94	.86	.92	.95	.90	.90	.86	Not Area Vo-Tech
												College Size
.93	.86	.92	.92	.95	.88	.91	.89	.94	.93	.89	.85	Large
.88	.81	.88	.88	.85	.88	.86	.93	.81	.90	.94	.72	Medium
.82	.83	.81	.82	.83	.81	.63	.86	.83	.82	.80	.88	Small
												Program Size
												Advan. & Prof.
1.00	.81	.83	.84	.97	.90	.83	.89	.96	.87	.86	.80	Large
	1.00	.81	.80	.82	.95	.78	.91	.82	.87	.80	.91	Medium
		1.00	.99	.86	.80	.95	.90	.83	.95	.94	.77	Small
												Occup.
			1.00	.86	.80	.94	.90	.84	.96	.93	.79	Large
				1.00	.86	.84	.88	.96	.88	.88	.81	Medium
					1.00	.79	.94	.86	.88	.84	.86	Small
												Develop.
						1.00	.83	.82	.91	.90	.76	Large
							1.00	.83	.94	.92	.85	Medium
								1.00	.87	.84	.83	Small
												Comm. Instr. Serv.
									1.00	.90	.79	Large
										1.00	.78	Medium
											1.00	Small

classified by personal characteristics except for the category of degree level. The correlation coefficients for respondents with a bachelors degree and for respondents with a specialist degree were consistently lower than those for respondents with either a masters or doctorate degree across all other categories of personal characteristics. The correlation coefficients for respondents with a specialist degree were generally lower than those for respondents with a bachelors degree.

The Spearman rank-order correlation coefficients calculated for the program characteristics ranked by mean usefulness-ratings by all respondents for respondents classified by institutional characteristics are reported in Table IV-46. The degree of similarity in the rank-ordered program characteristics was very high for all of the categories of institutional characteristics.

The Spearman rank-order correlation coefficients calculated for the program characteristics ranked by mean usefulness-ratings by all respondents for respondents classified by time spent, extent of involvement and level of experience in program quality-evaluation decision-making are reported in Table IV-47. These correlation coefficients ranged from a low of .43 to a high of .97. There was a relatively low degree of similarity (.55) in the ranked program characteristics between respondents reporting no time spent and respondents reporting either some or considerable (much) time spent in program quality-evalution decision-making. There was a much higher degree of similarity (.85) between respondents reporting some time spent and respondents reporting considerable time spent. Similarly, there was a relatively low degree of similarity in the ranked program characteristics between respondents reporting no involvement and respondents reporting much involvement in program

Table IV-47

Spearman Rank-Order Correlation Coefficients for the Upper Quartile of Mean Usefulness-Ratings by All Respondents Classified by Time Spent, Extent of Involvement and Level of Experience in Program Quality-Evaluation Decision-Making

	Time Spent			Extent of Involvement			Level of Experience			
	None	Some	Much	None	Some	Much	None	Lit.	Some	Much
Time Spent										
None	1.00	.55	.55	.86	.89	.47	.73	.65	.62	.53
Some		1.00	.85	.78	.97	.89	.53	.88	.96	.94
Much			1.00	.74	.87	.80	.54	.75	.82	.90
Extent of Involvement										
None				1.00	.78	.68	.80	.81	.78	.74
Some					1.00	.80	.55	.89	.96	.92
Much						1.00	.43	.72	.83	.89
Level of Experience										
None							1.00	.59	.52	.50
Little								1.00	.85	.80
Some									1.00	.87
Much										1.00

quality-evaluation decision-making. There was a low degree of similarity in the ranked program characteristics between respondents reporting no experience and those reporting either little, some or considerable experience in program quality-evaluation decision-making.

A summary of these results and conclusions and recommendations drawn from these results are presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

Project Rationale and Design

The increased call for accountability and quality in higher education has fostered numerous attempts to quantify or define quality. Regardless of the outcomes of these attempts, the determination of educational quality involves decision-making by responsible administrators. The decision-making process requires the use of some information describing the educational program being evaluated. A problem arises in determining what information is useful for program quality-evaluation decision-making.

The purpose of this project was to identify what information (program characteristics) is considered most useful by administrators in Florida's public community colleges in making quality-evaluation decisions about programs or services offered by their colleges. The project was based on a definition of educational evaluation as a process of providing relevant information for educational decision-making. The particular decision-making process addressed in this project was the determination of educational quality. Another objective of the project was to develop information profiles of program characteristics useful in program quality-evaluation decision-making. Another objective was to identify similarities or differences in the usefulness-ratings of the program characteristics by the program with which the administrators were primarily associated, by the administrative area within which the administrators

have their positions and by other personal and institutional classifications described in Appendix A.

A survey design was chosen for the project. A questionnaire was developed to collect data in the following areas: descriptive data on the respondents; usefulness-ratings of the program characteristics; opinions of the respondents on their experience, amount of time spent, and level of involvement in program quality-evaluation activities and the degree to which their position was associated with the program areas.

The sample population for the project consisted of all administrators in Florida's community college system who had some instructional or student personnel services responsibility and were identified on their college's yearly personnel report as administrative, managerial or professional. Lists of these administrators were compiled by project coordinators at each college. The project coordinators at each college distributed and collected the project questionnaires. The participating administrators rated 434 program characteristics for degree of usefulness in program quality-evaluation decision-making. The rating scale was:

1 = ESSENTIAL ("I do not see how I could make a judgment about the quality of a program without considering this characteristic.")

2 = VERY USEFUL ("I would feel hindered in making a judgment about the quality of a program without considering this characteristic, but I would make a judgment without it.")

3 = SOME USEFULNESS ("Although I would like to consider this characteristic in making a judgment about the quality of a program, I would not feel hindered in making a judgment without it.")

4 = LITTLE OR NO USEFULNESS ("I probably would not consider this characteristic in arriving at a judgment of the quality of a program.")

Also, any "not applicable" judgments were rated with a "4." Responses were received from 450 administrators representing 24 of Florida's 28

community colleges for a response rate of 71.3%.

Data Analysis

The mean, standard deviation, variance, range and measures of skewness and kurtosis were calculated for each program characteristic for all respondents and for respondents in each classification listed in Chapter III and described in Appendix A. Using the means, ranks were calculated for the program characteristics for all respondents and for respondents in each classification. For each classification Spearman rank-order correlation coefficients were calculated for the upper quartile of program characteristics ranked by the mean usefulness-ratings as determined for all respondents. The results of these analyses were reported in Chapter IV.

In Chapter IV, for all respondents and for respondents classified into five program areas (Advanced and Professional, Occupational, Developmental, Community Instructional Services, Student Services) and five administrative areas (General Administration, Academic Affairs, Student Services, Community Instructional Services, Business Affairs) and Presidents, the program characteristics in the upper quartile of ranked mean usefulness-ratings were organized into four categories (students, faculty/staff, costs/resources, general information). These are the same categories used in the project questionnaire (Appendix C). The differences or similarities in the program characteristics and in the ranks of the program characteristics contained in these groupings were discussed. For all respondents and for respondents classified into the five program areas, the program characteristics in the upper quartile of ranked mean usefulness-ratings were organized into information profiles using eleven types of information for all program areas except

Student Services which required a twelfth type of information. The areas of similarities or differences in the information profiles for each of the five program areas were discussed.

In the following, a summary of the results for all respondents is presented, followed by a summary for respondents classified into the five program areas, followed by a summary for respondents classified into the five administrative areas and Presidents which is followed by a summary for respondents classified by selected personal and institutional characteristics.

Results-All Respondents

The analysis of the program characteristics as rated by all respondents revealed that all the program characteristics in the upper quartile (ranked by mean usefulness-ratings) had a rating on the "essential" side of the rating scale (Table IV-3 and Appendix E). A wide variety of program characteristics was included with all four categories of program characteristics represented: students, faculty/staff, costs/resources, and general information (Table IV-4). This mass of information rated as highly useful was organized into an information profile for program quality-evaluation decision-making (Table IV-9). In that profile the program characteristics were grouped into eleven types of information:

Need for and structure of a program
Size
Costs
Utilization rates
Support services
Information on entering students
Information on currently enrolled students
Information on faculty/staff
Information from external/internal evaluations
Quantitative output
Ratings

Administrators indicated that they could not make a judgment or would

feel hindered in making a judgment about the quality of a program without considering these aspects of a program.

In relation to program need they identified level of demand for the program not only in the service area and by students already enrolled, but by need for the program in the state (Table IV-8). In relation to program structure, they identified clearly stated program objectives and program admission requirements as indispensable information for making judgments about program quality (Table IV-8). Information on program size necessary for quality judgments included the number of persons enrolling and the percent of total college FTE and total college unduplicated headcount enrolled in the program (Table IV-5).

Cost information identified included total cost and costs for instructional personnel, materials, administration, support services, equipment maintenance and space utilized (Table IV-9). Except for space utilized, all cost information was required per total program, per program FTE and per program unduplicated headcount (Table IV-7). Utilization rates required for quality-evaluation included equipment utilization, reported in all three ways, and space utilization, reported for total program only (Table IV-7). Information required on support services included number of support staff reported per total program, per program FTE and per program unduplicated headcount and number of library holdings per total program only (Table IV-7).

There was considerable overlap in the information identified relating to entering students and currently enrolled students (Table IV-9). For both entering and currently enrolled students, the information required for program quality-evaluation included number or percent of students by type of developmental or remedial assistance desired, by type of handicap,

by academic skills level as measured by local instruments and by major area of study (Table IV-5). In addition, previous level of academic achievement was identified as required for entering students and three measures of performance for currently enrolled students: average GPA of students in a program, number of hours with failing grade and cumulative GPA categories for program-related coursework (Table IV-5).

Administrators indicated they required considerable information about both fulltime and parttime faculty or staff in a program for making judgments about a program's quality (Table IV-9). For both fulltime and parttime faculty or staff, the information required included ratio of parttime to fulltime faculty or staff, the level of preparation (indicated by degrees and certification or rank held), level of experience (indicated by years taught or served and length of service in a program), level of productivity (indicated by number of students, student contact hours and course hours taught per term, average class size and productivity ratio) and level of instructional skill (indicated by use of alternative instructional methods) (Table IV-6). In addition, but for fulltime faculty or staff only, information required included the rate of turnover, the level of participation in program decision-making, the level of compensation and one additional productivity indicator: number of FTE per term (Table IV-6).

Another area of information identified as indispensable for making judgments about a program's quality related to external/internal evaluations (Table IV-9). Included in this type of information were ratings by accreditation agencies and certification boards and the number and/or types of changes as a result of accreditation studies and program evaluation (Table IV-8).

Quantitative output identified as necessary for program quality-evaluation included the number or percent of students completing a program; the number or percent of program completers taking and passing state board or licensure exams; the number or percent of program completers by type of license, certificate or registration received; the number or percent of program completers holding jobs for which trained; the number or percent of program completers by average time taken for completion of a program and the number or percent of students withdrawing from a program (Table IV-5).

Finally, administrators identified information from numerous ratings as required for judging program quality (Table IV-9). These included ratings of program completers by their employers and ratings of job satisfaction by program completers (Table IV-8). Ratings of various aspects of a program were identified: curriculum, facilities/equipment, instructional strategies, staff, administration and support services (Table IV-8). Ratings of all these aspects of a program except program administration were by three rater groups: faculty/staff, currently enrolled students and program completers (Table IV-8). Ratings of program administration were by faculty/staff and program completers only. Ratings of accessibility and ease of use of student services by currently enrolled students and program completers and ratings of usefulness of student services by both of these groups plus faculty/staff were identified as required for making program quality judgments (Table IV-8).

Results-Program Areas

The next analysis classified administrators into one of the five program areas, where, according to their reported position title, they had primary responsibility (Table IV-10). From the range (.25-.64) of the

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Spearman rank-order correlation coefficients calculated between the program areas, it was obvious that there were considerable differences among the program areas in the rank-order of the program characteristics in the upper quartile of mean usefulness-ratings by all respondents (Table IV-11). For each program area, just as for the analysis for all respondents, the program characteristics in the upper quartile of mean usefulness-ratings were identified and organized into the four categories of program characteristics (students, faculty/staff, costs/resources, general information) and organized into a composite information profile.

Except for the Student Services area, the five information profiles were organized using the same eleven types of information as were used for the information profile for all respondents: need for and structure of a program, size, costs, utilization rates, support services, information on entering students, information on currently enrolled students, information on faculty/staff, information from external/internal evaluations, quantitative output and ratings (Tables IV-17, IV-23, IV-35, IV-41). The Student Services area information profile required an additional type of information: transfer students (Table IV-29).

There was general agreement regarding what information about program need and structure is required for making judgments about a program's quality: clearly stated program objectives, level of demand for a program and program admission requirements. Although the rank-order of these program characteristics varied across program areas, all were identified as required for program quality-evaluation decision-making (Tables IV-16, IV-22, IV-28, IV-34, IV-40). The only deviation from this agreement was in the Developmental Program Area where information on program admission requirements was not identified as required for making judgments

about a program's quality but information on the number of alternative educational methods offered in a program was identified as required (Table IV-34).

Administrators classified in the five program areas indicated slightly different information about program size required for making program quality judgments. Administrators in the Advanced and Professional and Occupational program areas agreed that number of students enrolling in a program and the percent of total college FTE in a program were required (Tables IV-13, IV-19). For the Student Services area, percent of total college unduplicated headcount was added as required information on program size (Table IV-25). For the Community Instructional Services Program Area, only number enrolled and percent of total college unduplicated headcount in a program were identified as required (Table IV-40). For the Developmental Program Area, only number enrolled was identified as required (Table IV-34).

There was general agreement among the five program areas regarding cost information required for making judgments about a program's quality. The cost information identified as required by all five areas included total cost and cost of administration, instructional personnel, support services, materials, equipment maintenance and space utilized (Tables IV-17, IV-23, IV-29, IV-35, IV-41). The rank-order of these program characteristics varied across program areas, but all were identified as required. There were differences in whether they should be reported per total program, per program FTE and/or per program unduplicated headcount (Tables IV-15, IV-21, IV-27, IV-33, IV-39). Across all program areas, total cost and cost of instructional personnel and cost of materials required reporting in all three ways. Cost of administration required

reporting in all three ways by all program areas except Community Instructional Services which required reporting only per total program and per program FTE (Table IV-32). Cost of support services required reporting in all three ways by all program areas except the Occupational Program Area which required reporting only per total program (Table IV-21). Cost of equipment maintenance required reporting in all three ways in the Advanced and Professional and Developmental program areas (Tables IV-15, IV-23), per total program and per program FTE in the Occupational Program Area (Table IV-21) and only per total program in the Student Services and Community Instructional Services program areas (Tables IV-27, IV-39). Cost of space utilized required reporting only per total program in the Advanced and Professional, Occupational and Developmental program areas (Tables IV-15, IV-21, IV-33), per total program and per program FTE in the Community Instructional Services Program Area (Table IV-39) and in all three ways in the Student Services Program Area (Table IV-27). In addition to these seven types of cost information, the cost of program evaluation was identified as required in the Occupational Program Area (Table IV-21). In both the Developmental and Community Instructional Services program areas both the cost of program evaluation and the cost of needs assessments or other necessary research were identified as required in addition to the other seven costs (Tables IV-33, IV-39).

Information on utilization rates for equipment and space was identified as required for program quality-evaluation in all program areas except Community Instructional Services where only space utilization was identified as required (Tables IV-15, IV-21, IV-27, IV-33, IV-39).

Support services information identified as required by all program areas included number of support staff with two program areas (Advanced

and Professional and Occupational) additionally indicating number of library holdings per program as required (Tables IV-15, IV-21, IV-27, IV-33, IV-39).

There were considerable differences among the program areas in identifying information relating to entering students required for judging a program's quality (Tables IV-17, IV-23, IV-29, IV-35, IV-41). No program characteristic relating to entering students was identified as required by all program areas. Only one was identified by even four of the five program areas. Number or percent of entering students by type of handicap was indicated as required by all program areas except the Advanced and Professional Program Area (Tables IV-13, IV-19, IV-25, IV-31, IV-37). Number or percent of entering students by types of developmental or remedial assistance desired and by academic skills level as measured by local instruments were indicated as required by the Advanced and Professional, Developmental and Student Services program areas (Tables IV-13, IV-25, IV-31). Number or percent of entering students by major area of study and by degree level sought were identified as required by the Advanced and Professional, Occupational and Student Services program areas (Tables IV-13, IV-19, IV-25). Only the Occupational, Student Services and Community Instructional Services program areas identified as required the number or percent of entering students by level of awareness of college's programs and services and by career decision status (Tables IV-19, IV-25, IV-37). No other program characteristics relating to entering students were identified by two or more program areas.

Number or percent of entering students by level of previous academic achievement and by academic skills level as measured by state and national instruments were identified as required for judging a program's

quality only by the Advanced and Professional Program Area (Table IV-13). Respondents classified in the Student Services Area uniquely identified as required the number or percent of entering students by need for various student services (Table IV-25). In the Developmental Program Area, number or percent of entering students by test anxiety levels and by race classification were uniquely identified as required (Table IV-31). Number or percent of entering students by employment status, holding jobs for which trained and by age classification were uniquely identified as required by respondents classified in the Community Instructional Services Program Area (Table IV-37). There were no program characteristics relating to entering students uniquely identified as required by respondents in the Occupational Program Area.

For all program areas, the information relating to currently enrolled students identified as required for judging a program's quality was similar to that required for entering students (Tables IV-17, IV-23, IV-29, IV-35, IV-41). In two program areas less information was identified as required on currently enrolled than entering students. Respondents in the Community Instructional Services Program Area identified as required only number or percent of currently enrolled students by type of handicap and by level of awareness of college's programs and services (Table IV-37). Respondents in the Developmental Program Area identified as required the same program characteristics for currently enrolled as for entering students except not identifying for currently enrolled students information on academic skills level as measured by local instruments (Table IV-31). For the other program areas, more information was identified as required relating to currently enrolled than entering students. Respondents classified in the Advanced and Professional Program Area

identified the same program characteristics as required for currently enrolled students as for entering students except for two not applicable to currently enrolled students: degree level sought and level of previous academic achievement (Table IV-13). They identified four additional performance indicators relating to currently enrolled students as necessary for program quality-evaluation: the number or percent of currently enrolled students by average GPA, by average course load in a program, by performance on standardized state tests and by number of hours of developmental/remedial work taken (Table IV-13). Similarly, for the Occupational Program Area, the information relating to currently enrolled students was the same as that for entering students minus "level of awareness of college's programs and services" and adding three performance indicators for currently enrolled students: number or percent of currently enrolled students by cumulative GPA categories for program-related coursework, by average GPA of students in a program and by number of hours with failing grade (Table IV-19).

There were more differences in the information relating to currently enrolled compared to entering students for the Student Services Area than for any of the other program areas (Table IV-25). Respondents in the Student Services Area identified more program characteristics relating to entering and currently enrolled students than respondents in any of the other program areas (Table IV-24). The information they identified relating to currently enrolled students was the same as that relating to entering students except for three not applicable to currently enrolled students (degree level sought, types of developmental/remedial assistance desired, academic skills level as measured by local instruments) and adding five performance indicators and one indicator of

degree of use of student services (Table IV-25). The five performance indicators added were: number or percent of currently enrolled students by cumulative GPA categories, by cumulative GPA categories for program-related coursework, by average GPA of students in a program, by term GPA categories and by number of hours with failing grade (Table IV-25). Also added by Student Services respondents was the number or percent of currently enrolled students using student services (Table IV-25).

Information related to faculty or staff identified as required for making judgments about the quality of a program or service varied considerably across the program areas (Tables IV-17, IV-23, IV-29, IV-35, IV-41). Of the information identified, some related to both fulltime and parttime faculty or staff, some related to fulltime faculty or staff only and some related to parttime faculty or staff only (Tables IV-14, IV-20, IV-26, IV-32, IV-38). Only two characteristics relating to both fulltime and parttime faculty or staff were identified by all five program areas: number or percent of faculty/staff by degrees held (an indicator of level of preparation) and number or percent of faculty/staff by number of students per term (an indicator of productivity). Five characteristics relating to both fulltime and parttime faculty or staff were identified by at least four of the five program areas but with different sets of program areas agreeing. All of the program areas except Community Instructional Services identified ratio of parttime to fulltime faculty or staff as required for making judgments about a program's quality (Tables IV-14, IV-20, IV-26, IV-32). All of the program areas except Advanced and Professional identified number or percent of faculty or staff by average class size and by productivity ratio as required (Tables IV-20, IV-26, IV-32, IV-38). All of the program areas except

Student Services identified number or percent of faculty or staff by number of years taught or served and by number of student contact hours per term (Tables IV-14, IV-20, IV-32, IV-38).

Two characteristics relating to both fulltime and parttime faculty or staff were agreed upon by three program areas. Advanced and Professional, Occupational and Developmental program area respondents agreed in identifying number or percent of faculty or staff by length of service in a program as required information (Tables IV-14, IV-20, IV-32). The Occupational, Developmental and Community Instructional Services program area respondents agreed in identifying number or percent of faculty or staff by level of compensation as required (Tables IV-20, IV-32, IV-38). Only two program areas (Advanced and Professional and Developmental) agreed in identifying number or percent of fulltime and parttime faculty or staff by certificate or rank held as required (Tables IV-14, IV-32). Respondents in the Occupational Program Area uniquely identified as required two characteristics relating to both fulltime and parttime faculty or staff: number or percent of faculty or staff by number of course hours taught per term and by level of use of alternative instructional methods (Table IV-20). Similarly, respondents in the Developmental Program Area uniquely identified as required two characteristics relating to both fulltime and parttime faculty or staff: number or percent of faculty or staff by number of FTE per term and by type of language spoken (Table IV-32). Respondents in the Community Instructional Services Program Area uniquely identified as required one characteristic relating to both fulltime and parttime faculty or staff: the rate of faculty or staff turnover (Table IV-38).

For information relating only to fulltime faculty or staff, there

was variability across program areas also (Tables IV-17, IV-23, IV-29, IV-35). Respondents in the Community Instructional Services Program Area, unlike respondents in the other program areas, identified no information relating only to fulltime faculty or staff (Table IV-41). Instead, they identified information relating only to parttime faculty or staff (Table IV-38). For the other four program areas, there was agreement in identifying two characteristics relating only to fulltime faculty or staff: the rate of faculty or staff turnover and the number or percent of faculty or staff by level of participation in program decision-making (Tables IV-14, IV-20, IV-26, IV-32). Four characteristics relating only to fulltime faculty or staff were identified as required for program quality-evaluation by three of these program areas. Respondents in the Advanced and Professional, Occupational and Student Services program areas agreed in identifying as required information the number or percent of fulltime faculty or staff by number of FTE per term and by ratio of faculty to student support staff (Tables IV-14, IV-20, IV-26). Advanced and Professional, Occupational and Developmental program area respondents agreed in identifying as required information the ratio of fulltime faculty or staff to clerical staff (Table IV-14). The identification of number or percent of fulltime faculty or staff by number of course hours taught per term was agreed upon by Advanced and Professional, Student Services and Developmental program area respondents (Tables IV-14, IV-26, IV-32).

Three characteristics relating only to fulltime faculty or staff were agreed upon by different sets of two program areas. Advanced and Professional and Student Services program area respondents agreed in identifying as necessary information the number or percent of fulltime

faculty or staff by level of compensation (Tables IV-14, IV-26). Occupational and Student Services program area respondents agreed in identifying the number or percent of fulltime faculty or staff by certificate or rank held (Tables IV-20, IV-26). Occupational and Developmental program area respondents agreed in identifying the ratio of fulltime faculty or staff to administrative staff as required information (Tables IV-32, IV-38). Respondents in the Advanced and Professional Program Area uniquely identified as required information the number or percent of fulltime faculty or staff by a productivity ratio and by level of use of alternative instructional methods (Table IV-14). Student Services respondents uniquely identified as required information the number or percent of fulltime faculty or staff by number of student contact hours per term, by years taught or served and by length of service in a program (Table IV-26).

Respondents in the Community Instructional Services Program Area were unique in identifying the following characteristics as required information but only for parttime faculty or staff: number or percent of faculty or staff by number of course hours taught per term, by level of use of alternative instructional methods, by level of participation in program decision-making, by certificate or rank held and by level of public service (Table IV-38).

Information from external or internal evaluations agreed upon by all program areas as necessary for program quality-evaluation included ratings by accreditation agencies or certification boards (Tables IV-17, IV-23, IV-29, IV-35, IV-41). Respondents in the Occupational, Developmental, and Student Services program areas agreed upon identifying the number or type of changes as a result of program evaluation or accreditation studies

as required information (Tables IV-22, IV-28, IV-34). The number or types of changes as a result of program evaluation (but not as a result of accreditation studies) was identified as required information by respondents in both the Advanced and Professional and Community Instructional Services program areas (Tables IV-16, IV-40).

Quantitative output information identified as necessary for program quality-evaluation decision-making varied across program areas, also (Tables IV-17, IV-23, IV-29, IV-35, IV-41). However, there were six characteristics agreed upon by four or more of the program areas. All program area respondents agreed upon identifying the number of students completing a program and withdrawing from a program as required information (Tables IV-13, IV-19, IV-25, IV-31, IV-37). All program area respondents except the Developmental Program Area agreed upon identifying as required information the number or percent of program completers taking and passing state board or licensure exams, holding jobs for which trained and by type of license, certificate or registration received (Tables IV-13, IV-19, IV-25, IV-37). Advanced and Professional, Occupational and Community Instructional Services respondents additionally agreed upon identifying as required the number or percent of program completers by average time taken for completion (Tables IV-13, IV-19, IV-37). A related characteristic, the number or percent of program completers by time spent in a program, was identified by Community Instructional Services and Developmental program area respondents as required information (Tables IV-31, IV-37). Occupational, Developmental and Community Instructional Services program area respondents agreed in identifying the number or percent of program completers by employment status as required information (Tables IV-19, IV-31, IV-37). Respondents in the Developmental

and Community Instructional Services program areas identified as required information the number or percent of program completers by career decision status (Tables IV-31, IV-37). Advanced and Professional and Occupational program area respondents identified as required information the number or percent of program completers by major area of study (Tables IV-13, IV-19). Respondents in the Advanced and Professional and Developmental program areas agreed upon identifying as required information the number or percent of program completers by academic skills level as measured by local instruments (Tables IV-13, IV-31). Three additional measures of academic skills were identified as required by Advanced and Professional Program Area respondents: the number or percent of program completers by performance on standardized state and national tests and on other state instruments (Table IV-13). One additional measure of academic skills was identified as required by Developmental Program Area respondents: the number or percent of program completers by performance on national instruments (IV-31).

Other quantitative output information was identified as required by only one program area. Occupational Program Area respondents uniquely identified as required information the number or percent of program completers by salary categories (Table IV-19). Community Instructional Services Program Area respondents uniquely identified as required information the number or percent of program leavers by employment status (Table IV-37). Developmental Program Area respondents uniquely identified the greatest number of characteristics relating to quantitative outputs. They identified as required information the number or percent of program completers by type of handicap, by race classification, by citizenship classification, by self-concept categories, by test anxiety levels, by

types of developmental or remedial assistance desired and number or percent of program leavers by test anxiety levels (Table IV-31).

There was considerable agreement across program areas in the identification of information from various ratings as necessary in making judgments about the quality of a program or service but some differences regarding who should do the ratings (Tables IV-17, IV-23, IV-29, IV-35, IV-41). Ratings of program completers by employers and ratings of job satisfaction by program completers were identified as required information by all program areas except the Developmental Program Area (Tables IV-16, IV-22, IV-28, IV-40). Community Instructional Services respondents added ratings of program non-completers by employers and ratings of job satisfaction by program non-completers (Table IV-40).

All program area respondents agreed in identifying as required information ratings of a program's curriculum, facilities/equipment, instructional strategies, staff and administration (Tables IV-16, IV-22, IV-28, IV-34, IV-40). However, there were differences regarding who should do the ratings. Ratings of a program's curriculum only by program completers was identified as required by Advanced and Professional and Student Services respondents (Tables IV-16, IV-28). Ratings of a program's curriculum by currently enrolled students, program completers and faculty/staff were identified as required by Occupational, Developmental and Community Instructional Services respondents (Tables IV-22, IV-34, IV-40). Additionally, Community Instructional Services respondents required such ratings by program leavers and by the community in general (Table IV-40).

Ratings of program facilities/equipment by currently enrolled students, program completers and faculty/staff were identified as required

by all program areas with Community Instructional Services respondents adding ratings by program leavers and the community in general (Tables IV-16, IV-22, IV-28, IV-34, IV-40). Ratings of program instructional strategies by program completers and faculty/staff were identified as required by Advanced and Professional and Student Services respondents with Occupational, Developmental and Community Instructional Services respondents adding ratings by currently enrolled students and Community Instructional Services respondents additionally including ratings by program leavers (Tables IV-16, IV-22, IV-28, IV-34, IV-40).

Occupational and Developmental program area respondents identified as required ratings of program staff by currently enrolled students, program completers and faculty/staff with Community Instructional Services respondents in agreement but adding ratings by program leavers (Tables IV-22, IV-34, IV-40). Advanced and Professional respondents identified as required ratings of program staff by program completers and faculty/staff (Table IV-16). Student Services respondents identified ratings of program staff by currently enrolled students and program completers (Table IV-28).

Ratings of program administration by faculty/staff were identified as required by Advanced and Professional and Student Services respondents to which Occupational and Developmental respondents added ratings by program completers (Tables IV-16, IV-22, IV-28, IV-34). Developmental respondents additionally added ratings by currently enrolled students (Table IV-34). Community Instructional Services respondents identified as required ratings of program administration only by currently enrolled students and faculty/staff (Table IV-40).

Ratings of support services by currently enrolled students, program

completers and faculty/staff were identified as required by Occupational, Developmental and Student Services program area respondents (Tables IV-22, IV-28, IV-34). Advanced and Professional respondents identified as required ratings of support services only by faculty/staff with which Community Instructional Services respondents agreed but to which they added ratings by currently enrolled students (Tables IV-16, IV-40).

Ratings of three aspects of student services (accessibility, ease of use, usefulness) were identified as required for program quality-evaluation decision-making by all program areas (Tables IV-16, IV-22, IV-28, IV-34, IV-40). However, differences occurred regarding who should do the ratings. Advanced and Professional Program Area respondents identified ratings of all three aspects of student services by currently enrolled students as required plus ratings of usefulness of student services by program completers (Table IV-16). Occupational Program Area respondents identified as required ratings of all three aspects of student services by currently enrolled students and program completers (Table IV-22). Developmental Program Area respondents identified as required ratings of all three aspects of student services by currently enrolled students, program completers and faculty/staff (Table IV-34). Community Instructional Services Program Area respondents identified as required ratings of usefulness of student services by currently enrolled students, program completers and faculty/staff and ratings of the other two aspects of student services by these raters plus ratings by program leavers (Table IV-40). Student Services respondents identified as required ratings of all three aspects of student services by currently enrolled students, program completers and program leavers with usefulness of student services also rated by faculty/staff (Table IV-28).

For all program areas except Student Services, the information profiles required only these eleven types of information: need for and structure of a program, size, costs, utilization rates, support services, information on entering students, information on currently enrolled students, information on faculty/staff, information from external/internal evaluations, quantitative output and ratings (Tables IV-17, IV-23, IV-34, IV-41). The Student Services Area required an additional type of information: information on transfer students (Table IV-29). Student Services was the only program area where program characteristics relating to transfer students occurred in the upper quartile of ranked mean usefulness-ratings (Table IV-25). Student Services Area respondents indicated as information required for judging the quality of a program or service the number or percent of students transferring with an associate degree enrolling in a four-year institution, the number or percent by upper division cumulative GPA categories and the number or percent completing a four-year degree (Table IV-25). Also, they indicated as required information the number or percent of students transferring without an associate degree by average GPA (Table IV-25). Additionally, they indicated as required information the number or percent of native students by average GPA (Table IV-25).

Results-Administrative Areas

The next analysis of the data was based upon a classification of the respondents into five administrative areas according to reported position title: general administration, academic administration, student affairs, community instructional services and business affairs (p. 129). The distribution of respondents among these areas was reported in Table IV-2. The position codes included in each area were reported in Appendix

A. Position codes were described in Appendix D. For this analysis, it should be understood that although there was no overlapping of respondents as classified into the administrative areas, there was overlapping of some respondents as they were classified into administrative areas and the program areas. For the administrative areas of General Administration and Business Affairs, no respondents classified in these areas were included in any of the five program areas because these administrators had no primary responsibility in any program area. For the administrative area of Academic Affairs, most respondents classified in this area were included in the Advanced and Professional, Occupational, and Developmental program areas. For the administrative areas of Student Affairs and Community Instructional Services, the same respondents were included in the corresponding program areas. In addition, a separate analysis was done for the position title "presidents" although they were included in the General Administration area.

The analysis by administrative area consisted of calculating Spearman rank-ordered correlation coefficients between the administrative areas and the program areas and between each administrative area using the upper quartile ranked mean usefulness-ratings as determined for all respondents (Tables IV-42, IV-44). Also, the distribution was reported of the program characteristics in the upper quartile of ranked mean usefulness-ratings for each administrative area among the four categories of program characteristics (students, faculty/staff, costs/resources, general information)(Table IV-43).

There was a relatively high degree of similarity (.61-.74) in the upper quartile ranked mean usefulness-ratings between the General Administration area and all of the program areas except the Developmental Program

Area (.32)(Table IV-42). There was a relatively low degree of similarity (.35-.55) between the Business Affairs area and all of the program areas except Student Services (.60)(Table IV-42). There was a low degree of similarity (.28-.48) between the Presidents and all program areas (Table IV-42). Since there were overlapping respondents between the Academic Affairs area and the Advanced and Professional, Occupational and Developmental program areas, the correlation coefficients with these areas were not considered. The degree of similarity between the Academic Affairs area and the Student Services and Community Instructional Services program area was .59 and .62 respectively (Table IV-42).

There was a relatively high degree of similarity in the upper quartile ranked mean usefulness-ratings between the General Administration area and the other four administrative areas with the Spearman rank-order correlation coefficients ranging from .61 (with both Business Affairs and Community Instructional Services) to .86 (with Academic Affairs)(Table IV-44). The degree of similarity of Academic Affairs with administrative areas other than General Administration was fairly constant, the Spearman rank-order correlation coefficients ranging from .58 to .62 (Table IV-44). The degree of similarity of Student Affairs was very low with Community Instructional Services (.33), about the same with Academic Affairs and Business Affairs (.59 and .60), and relatively high with General Administration (.71)(Table IV-44). The degree of similarity of Business Affairs was relatively low with Community Instructional Services (.45) and about the same with the other three administrative areas (.58 to .61) (Table IV-44). The degree of similarity of Community Instructional Services was relatively low with Student Affairs and Business Affairs (.33 and .45) and considerably higher with General Administration and Academic

Affairs (.61 and .62).

The degree of similarity in the upper quartile ranked mean usefulness-ratings was fairly low between Presidents and the Business Affairs, Community Instructional Services and Student Affairs administrative areas (.44, .47, .48) and slightly higher between Presidents and the Academic Affairs administrative area (.57)(Table IV-44). Since Presidents were included in the General Administration area, it was expected that the degree of similarity with that area would be relatively high (.72)(Table IV-44).

These results suggested that there were some areas of differences among respondents, as they were classified according to administrative areas and program areas, in their perceptions of the degree of usefulness of various program characteristics in making program quality-evaluation decisions. Although the specific differences and similarities in the program characteristics by administrative area were not discussed, where these differences and similarities might have occurred was suggested by the distribution for each administrative area of the program characteristics among the four categories of program characteristics (students, faculty/staff, costs/resources, general information)(Table IV-43). From that table it was determined that Presidents identified a higher percentage of program characteristics relating to students and a lower percentage relating to faculty/staff and costs/resources than any other administrative area (Table IV-43). The pattern of distribution of the program characteristics among the four categories for Presidents was much different from the pattern for any other administrative area. Business Affairs had the highest percentage of program characteristics relating to costs/resources of any administrative area (Table IV-43).

Even so, they appeared to have had the most even distribution of program characteristics across the four categories. Academic Affairs had the highest percentage of program characteristics relating to faculty/staff and next to the lowest percentage relating to students of any of the administrative areas (Table IV-43). Community Instructional Services had the lowest percentage of program characteristics relating to students and the highest percentage relating to general information of any of the administrative areas (Table IV-43). General Administration had the lowest percentage of program characteristics relating to general information and next to the highest percentage relating to costs/resources (Table IV-43). Student Affairs had next to the highest percentage of program characteristics relating to students and next to the lowest percentage relating to faculty/staff (Table IV-43). Across all administrative areas, there appeared to be the least difference in distribution of program characteristics relating to costs/resources and the most difference in distribution of program characteristics relating to general information and students (Table IV-43). Although not discussed, the program characteristics in the upper quartile of ranked mean usefulness-ratings for each administrative area were presented, organized by the four categories of program characteristics, in Appendix G.

Results-Selected Personal and Institutional Characteristics

In addition to analyzing the data by respondents classified into the program or service area with which they were primarily associated and into the administrative area within which they held their positions, analyses were done for respondents grouped according to personal characteristics (degree level, sex, years in present position, etc.), according to general characteristics of the institution within which the respondents

were employed (size of college, whether designated area vocational school or not, size of each program area by percent of total college FTE, etc.) and according to several types of opinions requested on the project questionnaire (time spent in program quality-evaluation decision-making, level of experience in program quality-evaluation decision-making, etc.). These classifications were described in Appendix A.

For these classifications only the Spearman rank-order correlation coefficients were reported for the program characteristics ranked by the mean usefulness-ratings in the upper quartile of mean usefulness-ratings by all respondents (Tables IV-45, IV-46, IV-47).

For respondents classified by level of degree, sex, years at present college, years in present position, years in community college education, and years in education other than community college education, the degree of similarity in the rank-ordered program characteristics was very high (.74 or greater) for all classifications except "level of degree" (Table IV-45). The correlation coefficients for respondents with bachelors or specialist degrees were consistently lower than those for respondents with either masters or doctorate degrees across all other categories of personal characteristics (Table IV-45).

The Spearman rank-order correlation coefficients calculated for the program characteristics ranked by mean usefulness-ratings by all respondents for respondents classified by institutional characteristics indicated a high degree of similarity (.72 or greater) in the rank-ordered program characteristics for all categories of institutional characteristics (Table IV-46).

For respondents classified by time spent, extent of involvement and level of experience in program quality-evaluation decision-making, the

correlation coefficients ranged from .43 to .97 (Table IV-47). There was a relatively low degree of similarity (.55) in the ranked program characteristics between respondents reporting no time spent and respondents reporting either some or considerable ("much" in the table) time spent in program quality-evaluation decision-making (Table IV-47). There was a higher degree of similarity (.85) between respondents who reported some time spent and respondents who reported considerable time spent (Table IV-47). Similarly, there was a relatively low degree of similarity between respondents who reported no involvement and respondents who reported much involvement in program quality-evaluation decision-making (Table IV-47). Also, there was a low degree of similarity in the ranked program characteristics between respondents who reported no experience and those who reported either little, some or considerable experience in program quality-evaluation decision-making (Table IV-47).

Conclusions

From the project results as reported in Chapter IV and summarized in this chapter, the following conclusions were drawn:

1. Multiple program characteristics were identified as required for program quality-evaluation decision-making indicating that "quality" is a multiple-dimensioned concept (Table IV-3).
2. Program characteristics relating to students, faculty/staff, costs/resources and general information were identified indicating the comprehensive nature of information requirements for program quality-evaluation decision-making (Tables IV-4 through IV-8).
3. Program characteristics identified varied across program areas (Advanced and Professional, Occupational, Developmental, Community Instructional Services, Student Services) indicating program-specific information needs for quality-evaluation decision-making (lables IV-13 through IV-41).
4. Although the specific program characteristics varied across program areas, there were eleven types of information identified indicating the possibility of constructing comparable information profiles for program quality-evaluation decision-making for all program areas including information on need for and structure of a program, size, costs, utilization rates, support services, information on entering students, information on currently enrolled students, information on faculty/staff, information from external/internal evaluations, quantitative output and ratings (Tables IV-9, IV-17, IV-23, IV-35, IV-41) with an additional type of information for the Student Services Area: transfer

students (Table IV-29).

5. When ranked by mean usefulness-ratings, the rank-order of program characteristics varied across program areas (Tables IV-3 and IV-11) and the distribution of program characteristics relating to students, faculty/staff, costs/resources and general information varied across program areas (Tables IV-12, IV-18, IV-24, IV-30, IV-36) indicating program-specific emphasis on the degree of usefulness of types of information.
6. Although there were differences in the rank-order and distribution of program characteristics across types of information, there was general agreement across program areas regarding information relating to program need and structure, program size, program costs, program utilization rates, program support services, information from external and internal evaluations and information from various ratings, indicating areas of commonality across program areas in information requirements for quality-evaluation decision-making (Tables IV-9, IV-17, IV-23, IV-29, IV-35, IV-41).
7. Although there was general agreement across program areas regarding cost information, there were considerable differences regarding whether the information should be reported per total program, per program FTE or per program unduplicated headcount, indicating specific reporting priorities by cost category per program area for quality-evaluation information systems (Tables IV-15, IV-21, IV-27, IV-33, IV-39).
8. For the Occupational, Developmental and Community Instructional Services program areas, the cost of doing program evaluations

was identified as a necessary consideration in making judgments about the quality of a program or service indicating, perhaps, program-specific differences in costs of evaluations (Tables IV-21, IV-33, IV-39).

9. For the Developmental and Community Instructional Services program areas, the cost of needs assessments or other necessary research was identified as a necessary consideration in making judgments about the quality of a program or service again indicating, perhaps, program-specific differences in the costs of performing these activities (Tables IV-33, IV-39).
10. Respondents in all program areas agreed in identifying ratings by accreditation agencies or certification boards as required information for program quality-evaluation decision-making indicating the continuing importance of such external evaluations (Tables IV-16, IV-22, IV-28, IV-34, IV-40).
11. Although there was general agreement across program areas regarding information from various ratings required for program quality-evaluation decision-making, there were considerable differences regarding which raters should rate what information indicating specific priorities for collecting this information per program area (Tables IV-16, IV-22, IV-28, IV-34, IV-40).
12. Since administrators were the respondents in this project, the fact that in all program areas they identified as required information for quality-evaluation decision-making ratings of program administration by faculty/staff, and in specific program areas ratings of program administration by other groups of raters, indicates administrators value highly feedback regarding

their activities (Tables IV-16, IV-22, IV-28, IV-34, IV-40).

13. There were considerable differences across program areas regarding the information required relating to entering students, currently enrolled students, faculty/staff and a program's quantitative output, indicating where information needs for quality-evaluation decision-making require tailoring to the specific program area (Tables IV-9, IV-17, IV-23, IV-29, IV-35, IV-41).
14. Administrators in the Advanced and Professional Program were unique in identifying various testing information for entering, currently enrolled and completing students indicating the importance of testing information for program quality-evaluation decision-making in that program area (Table IV-17).
15. Administrators in the Occupational, Student Services and Community Instructional Services program areas identified as required information the level of awareness of entering students of a college's programs and services indicating the importance of a college's publicity and/or recruitment activities to program quality-evaluation decision-making in these program areas (Tables IV-23, IV-29, IV-41).
16. Developmental Program Area respondents uniquely identified as required for making quality-evaluation decisions information on the test anxiety levels of entering students indicating specific student-assessment requirements to meet the quality-evaluation information needs of this program area (Table IV-31).
17. Respondents in the Community Instructional Services Program Area uniquely identified information on the employment status of entering students and whether they were holding jobs related

to their training indicating specific registration information required to meet the quality-evaluation information needs of this program area (Table IV-37).

18. Student Services Area respondents identified more information relating to entering and currently enrolled students than any other program area indicating the broad base of student-related information required for making program quality-evaluation decisions in this program area (Table IV-24).
19. In all program areas respondents identified considerable information relating to faculty/staff indicating the importance of faculty/staff variables in program quality-evaluation decision-making (Tables IV-17, IV-23, IV-29, IV-35, IV-41).
20. Respondents in all program areas except Community Instructional Services identified level of participation in program decision-making as required information on fulltime faculty or staff and Community Instructional Services respondents identified it for parttime faculty or staff not only indicating a difference in the nature of the Community Instructional Services program but also indicating the degree of importance attached by administrators to faculty/staff involvement in a program as a necessary consideration for making quality judgments about a program or service (Tables IV-14, IV-20, IV-26, IV-32, IV-38).
21. There was considerable information identified relating to quantitative outputs and considerable variability in this information across program areas indicating not only the importance of follow-up systems but also the importance of tailoring follow-up systems by program area (Tables IV-17, IV-23, IV-29, IV-35, IV-41).

22. Student Services Area respondents were unique in identifying information relating to transfer students as required for program quality-evaluation decision-making indicating not only some specific parameters for quality-evaluation information systems for this program area but also some possible reassessment of the value of such information for quality-evaluation decision-making in the academic program areas where there was reliance on other indicators of quality (Tables IV-13, IV-19, IV-25, IV-31, IV-37).

23. There was a relatively high degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics rated by administrators classified in the administrative area of General Administration and administrators classified in all the program areas except Developmental indicating that administrators such as provosts, campus deans, center directors, assistants to the president and similar administrators (see Appendix A) were very similar to administrators (except Developmental) with direct program responsibilities in identifying what information they required for quality-evaluation decision-making (Table IV-42).

24. There was a relatively low degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by administrators classified in the administrative area of Business Affairs and administrators classified in all program areas except Student Services indicating that

administrators in these areas differed in some degree from administrators with direct program responsibilities (except Student Services) in identifying what information they require for program quality-evaluation decision-making (Table IV-42).

25. There was a relatively low degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by Presidents and administrators classified in all program areas indicating that Presidents differed in some degree from administrators with direct program responsibilities in identifying what information they require for program quality-evaluation decision-making (Table IV-42).

26. There was a relatively high degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by administrators classified in the administrative area of General Administration and administrators classified in all the other administrative areas with the highest degree of similarity with Academic Affairs (such as program directors and chairpersons, see Appendix A) and the lowest degree of similarity with Business Affairs and Community Instructional Services indicating that administrators in General Administration were more similar to Academic Affairs administrators than other classifications of administrators in identifying what information they require for program quality-evaluation decision-making (Table IV-44).

27. While there was a relatively high degree of similarity in the

rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by administrators classified in the administrative areas of Academic Affairs and General Administration, there was a considerably lower degree of similarity of Academic Affairs administrators with all the other administrative areas indicating that while administrators in Academic Affairs (such as program directors and chairpersons, see Appendix A) were very similar to General Administration administrators, they were much less similar to Business Affairs, Student Affairs and Community Instructional Services administrators in identifying what information is required for program quality-evaluation decision-making (Table IV-44).

28. Of all the administrative areas, there was the lowest degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by Student Services administrators and Community Instructional Services administrators indicating that the information identified as required for program quality-evaluation decision-making was very different for these two administrative areas (Table IV-44).

29. There was a relatively high degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by Business Affairs administrators with all the other administrative areas except the Community Instructional Services administrators indicating that Business Affairs administrators

were similar to General Administration, Academic Affairs and Student Affairs administrators and very different from Community Instructional Services administrators in what informa- they identified as required for program quality-evaluation decision-making (Table IV-44).

30. The degree of similarity in the rank-order (by mean usefulness-ratings as determined for all respondents) of the upper quartile program characteristics as rated by Presidents was relatively low in relation to the ratings by Business Affairs, Student Affairs and Community Instructional Services administrators and slightly higher in relation to the ratings by Academic Affairs administrators indicating that Presidents differed in some degree from administrators in all of these areas but to a lesser degree with Academic Affairs administrators in identifying what information is required for program quality-evaluation decision-making (Table IV-44).

31. Although the specific differences and similarities in the program characteristics identified by each administrative area and Presidents were not discussed, the differences by type of administrator in the distribution of these program characteristics across the categories of students, faculty/staff, costs/resources and general information indicated areas where information systems for program quality-evaluation decision-making require tailoring by type of administrator (as well as by program area as indicated in conclusions 3 and 13)(Table IV-43).

32. There was a high degree of similarity in the rank-order (by mean usefulness-rating as determined for all respondents) of

the upper quartile program characteristics among administrators classified according to all the selected personal characteristics (sex, years at present college, years in present position, years in community college education, and years in education other than community college education) except level of degree indicating that only variations in level of degree were related in some degree to the ratings by administrators of the degree of usefulness of the program characteristics in making program quality-evaluation decisions (Table IV-45).

33. The Spearman rank-order correlation coefficients calculated for the upper quartile program characteristics ranked by mean usefulness-ratings by all respondents among respondents classified by selected institutional characteristics were all high indicating that variability in the selected institutional characteristics was largely unrelated to the ratings by administrators of the degree of usefulness of the program characteristics in making program quality-evaluation decisions (Table IV-46).

34. The range of the correlation coefficients calculated for the upper quartile program characteristics ranked by mean usefulness-ratings by all respondents among respondents classified according to self-reported time spent, extent of involvement and level of experience in program quality-evaluation decision-making indicated that variations among administrators on these dimensions were related to the ratings by administrators of the degree of usefulness of the program characteristics in making program quality-evaluation decisions (Table IV-47).

Recommendations

Although other parameters, such as limited fiscal resources or cost-effectiveness, should be considered in the implementation of any recommendations, the following recommendations are made on the basis of the results of this project:

1. Program quality-evaluation decision-making information systems should be designed to provide the multiple information identified in this project as highly useful by administrators per program area.
2. Using the results of this project, existing information systems in Florida's community colleges should be reviewed for usefulness in program quality-evaluation decision-making.
3. Using the results of this project, Florida's Community College Management Information System should be reviewed for usefulness in program quality-evaluation decision-making.
4. Program quality-evaluation in Florida's community colleges should be designed and conducted by program area and not by institution.
5. Program quality-evaluation in Florida's community college system should be designed and conducted by program area and not by total system.
6. The results of this project should be considered in the development of program quality indicators for the Community College System of the State of Florida.
7. Quality-evaluation decision-making information systems should be designed to provide the varying information requirements of different types of administrators such as those with primary responsibility for a program area, those with broader academic

responsibilities, those with business affairs responsibilities, Presidents, etc.

8. Quality-evaluation decision-making information systems should provide the information identified in this project as required by program area and by type of administrator according to the reporting requirements defined per type of information.
9. Data related to program characteristics identified in this project as highly useful for program quality-evaluation which are not currently being collected should be collected within current fiscal constraints.
10. Using the information profiles described in this report with the related program characteristics, index scales should be developed for each type of information in the profiles per program area for use in presenting information in a useful form to administrators engaged in program quality-evaluation decision-making.
11. Computerized systems should be designed and implemented using these indices to produce program profiles for use by administrators engaged in program quality-evaluation decision-making.
12. Inservice training workshops should be designed and conducted concerning the use of the results of this project to facilitate communication between administrators with primary responsibilities in program areas and between these administrators and administrators with broader responsibilities regarding the design and/or operation of an institution's system or systems of program quality-evaluation decision-making.
13. Level of training (degree held) and level of experience in program quality-evaluation decision-making (time spent, extent of

involvement, extent of experience in program quality-evaluation decision-making) should be determined for administrators and should be considered in the design, operation and/or evaluation of any existing or planned quality-evaluation information system.

14. The methodology used in this project should be used to refine the program quality-evaluation decision-making information needs at each community college.
15. The methodology used in this project should be used to identify the program quality-evaluation information needs for other segments of Florida's educational system including K-12 and the State University System.
16. The methodology used in this project should be used to identify the information requirements for other types of administrative/managerial decisions.
17. A methodology should be developed to measure the level of participation of faculty/staff in a program's decision-making process so this information may be incorporated into the program quality-evaluation decision-making process.
18. A methodology should be developed to determine the number and/or types of changes which occur as a result of program accreditation and certification studies so this information may be incorporated into the program quality-evaluation decision-making process.
19. Assessment of entering students should be revised to include determination of test anxiety levels as required for Developmental program quality-evaluation.

20. Information on registration forms for Community Instructional Services courses should be revised to collect the information required for program quality-evaluation decision-making.
21. This project should be replicated on a random sample of administrators with primary responsibilities in the five program areas who were involved in this project.
22. This project should be replicated in other community college systems.
23. The data collected in this project should be factor-analyzed by program and administrative area to determine if there are clusters of program characteristics which are rated in the same pattern from which some constructs may be developed for designing information profiles for program quality-evaluation decision-making.
24. The data collected in this project should be analyzed for the second, third and fourth quartiles of ranked mean usefulness-ratings in the same manner as the first quartile to identify similarities or differences among the quartiles.

APPENDICES

APPENDIX A

CLASSIFICATIONS USED IN DATA ANALYSIS

Program Areas

1. Advanced and Professional Program Area--commonly referred to as university parallel, the first two years of a baccalaureate program. Included in this group were respondents classified with position codes 16-20, 22, 25 and 29.
2. Occupational Program Area--or vocational-technical education, terminal certificate or degree programs preparing students for employment in a specific trade or field. Included in this group were respondents classified with position codes 21, 23, 24, 26, 27 and 28.
3. Community Instructional Services Program Area--programs of short, credit or noncredit classes designed to provide enrichment for students. Included in this area were respondents classified with position code 29.
4. Developmental Program Area--or compensatory education, designed to assist students in improving deficient basic skills necessary for program required work. Included in this area were respondents classified with position codes 33 and 34.
5. Student Services Program Area--various auxilliary services provided to students facilitating their progress through one of the academic areas including such services as counseling, student activities, admissions, financial aid, etc. Included in

this group were respondents classified with position codes 36-46.

Administrative Areas

1. General Administration--respondents with responsibilities of a general nature in the operation of the college's program or services. Included in this area were position codes 01-12.
2. Academic Affairs--respondents with responsibilities of administering one or more of the college's academic programs. Included in this area were position codes 13-28 and 30-31.
3. Student Affairs--respondents with responsibilities of administering one or more of the college's student services programs. Position codes included in this area were identical to those used for the Student Services Program Area.
4. Community Instructional Services--respondents with responsibilities of administering the college's adult and continuing education or community instructional services programs. Position codes included in this area were identical to those used for the Community Instructional Services Program Area.
5. Business Affairs--respondents associated with the operation of the business offices (budget, accounting, personnel, etc.) of the college. Included in this area were position codes 42-50.
6. President--the chief executive officer of the college (position code 1).

Personal Characteristics

1. Degree Level--Bachelors, Masters, Specialist or Doctorate.
2. Sex--male or female.
3. Years in Present Position--number or years the respondent has

held current position. Four divisions were used for comparison: less than three years, three to five years, six to ten years, and greater than ten years.

4. Years at Present College--number of years the respondent has been employed by present college. Four divisions were used for comparison: less than six years, six to ten years, 11 to 15 years, and greater than 15 years.
5. Years in Community College Education--total number of years respondent has been with a community college. Four divisions were used for comparison: less than seven years, seven to 11 years, 12 to 15 years, and greater than 15 years.
6. Years in Education Other than Community College Education--number of years respondent has been employed in an educational institution other than a community college. Four divisions were used for comparison: less than one year, one to five years, six to ten years, and greater than ten years.

Institutional Characteristics

1. Market Regions--The Bureau of Economic and Business Research at the University of Florida has divided the state of Florida into five market regions based primarily on location. These market regions are: (1) Northwest--from Taylor County west; (2) Northeast--from Marion County north; (3) Central--from Flagler County to Sumter County south to Osceola County; (4) Southwest--from Citrus County to Highlands County south to Collier County; and (5) from Indian River County south. Colleges were categorized based on their location in one of these market regions (Thompson, 1980, p. 14).

2. Colleges Designated as Area Vocational Education Schools by the Florida Department of Education were compared with those not so designated (Department of Education, 1981b, p. 25).
3. Total FTE--total FTE served by each institution during the 1979-1980 school year. Three divisions were used for comparison: less than 2,900, 2,900 to 8,000 and greater than 8,000 (Florida Department of Education, 1981a, p. 11).
4. Percent of Total College FTE Served Classified in the Advanced and Professional Program Area during the 1979-1980 school year. Three divisions were used for comparison: less than 50%, 50% to 60%, greater than 60% (Florida Department of Education, 1981a, pp. 12-17).
5. Percent of Total College FTE Served Classified in the Occupational Program Area during the 1979-1980 school year. Three divisions were used for comparison: less than 33%, 33% to 37%, greater than 37% (Florida Department of Education, 1981a, pp. 12-17).
6. Percent of Total College FTE Classified in the Developmental Program Area during the 1979-1980 school year. Three divisions were used for comparison: less than 1%, 1% to 10%, greater than 10% (Florida Department of Education, 1981a, pp. 12-17).
7. Percent of Total College FTE Served Classified in the Community Instructional Services Program Area during the 1979-1980 school year. Three divisions were used for comparison: less than 2%, 2% to 3%, and greater than 3% (Florida Department of Education, 1981a, pp. 12-17).

Respondent Opinions

1. Time Spent in Program Quality-Evaluation--respondents' opinions of time spent in program quality-evaluation activities. The following five point scale was used: 1 = none, 2 = little, 3 = some, 4 = considerable, 5 = all. This scale was collapsed into three categories for the purpose of reporting correlations. Opinion choices 1 and 2 became "none," opinion choices 4 and 5 became "much" and opinion choice 3 remained "some".
2. Extent of Involvement in Program Quality-Evaluation--respondents' opinions of their extent of involvement in program quality-evaluation decision-making at their institutions. The opinion choices were identical to those used in the previous opinion grouping (time spent) and were handled identically for the purpose of reporting correlations.
3. Level of Experience in Program Quality-Evaluation--respondents' opinions of their level of experience in program quality-evaluation decision-making. A four point scale was used: "none," "little," "some" and "considerable."

APPENDIX B

LETTERS

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

INITIAL LETTER SENT TO IRC REPRESENTATIVES FOR REFINEMENT OF PROGRAM CHARACTERISTICS

Memorandum

TO: IRC Representatives

FROM: Al Steuart, Bix Rathburn

RE: List of ProgramCharacteristics

Please review the attached list of program characteristics of potential use to decision-makers in making program quality-evaluation decisions.

Please indicate on the list any changes that you would like (wording, additions, deletions) and return to the IRC office as soon as possible.

Thank you.

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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

INITIAL LETTER SENT TO PRESIDENTS
REQUESTING THEIR PARTICIPATION IN THE STUDY

At the May meeting, the Council of Presidents voted an endorsement of a study being conducted by the Florida Community/Junior College Inter-Institutional Research Council. The purpose of this study is to identify community college program characteristics of potential use to administrators in making program quality-evaluation decisions. A synopsis of the project proposal is enclosed.

As indicated at the council meeting, the participation of all of Florida's community and junior colleges is being solicited to enhance the value of the study. Such participation will provide a meaningful basis for creating a multiple-criteria model for program quality-evaluation decision-making of use to each college.

Please use the enclosed form to identify the study coordinator for your college. The coordinator will be responsible for (1) identifying the study participants at the college according to criteria stated in the enclosed synopsis and (2) distributing and collecting the survey instruments. For IRC member colleges, it is suggested that the IRC representatives be designated the study coordinators. For non-member colleges, it will be appreciated if someone with some research or research-related responsibilities be designated as study coordinator. A stamped, self-addressed envelope is enclosed for your convenience.

Thank you for your cooperation in this project.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
The Quality Indicators Project Committee

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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

LETTER SENT TO PROJECT COORDINATORS THANKING THEM

The IRC has been notified that you have agreed to serve as the coordinator at your college for the IRC's research project. This project is designed to identify program characteristics useful in program quality-evaluation decision-making in Florida's public community/junior colleges. Thank you for agreeing to serve and thank you in advance for your time and energy in making this project a success.

A copy of the proposal describing the project is enclosed. As project coordinator, your role is:

(1) Identify by name and position all administrators at your college (including all campuses or centers of multi-unit colleges) who meet the criteria for inclusion in this project. This should include all administrators with some instructional or student personnel services responsibility as identified in the "Personnel and Salary Reports" (SA-1), Part 3 ("Executive, Administrative and Managerial Personnel") described in the Community College Management Information System Manual beginning on page 10.1. In addition to these administrators, each college is requested to identify two trustees and two members for any advisory councils associated with any of the program areas, preferably the chairperson and vice-chairperson, to participate in the project. For the trustees and advisory council members, whom you identify and the procedures you use to select them are left to your discretion. Forms and a self-addressed return envelope are enclosed. If you require more copies of the forms than enclosed, it will be appreciated if you will make the necessary additional copies. You do not have to keep a copy of the completed lists. A copy will be returned to you when the questionnaires are sent for distribution. Your submission of the lists of project participants as soon as possible will be appreciated.

(2) Distribute and collect the questionnaires. The questionnaires will be sent to you after the list of study participants has been received. Each participant will be mailed a letter from the IRC office explaining the project and soliciting his/her participation prior to the questionnaires being sent to you. The letter will explain that you will be distributing and collecting the questionnaires.

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APPENDIX B (continued)

LETTER SENT TO PROJECT COORDINATORS THANKING THEM
(continued)

If you have any questions about the project, please call the IRC office at SUNCOM 622-0745 or SUNCOM 622-0706.

Again, thank you for agreeing to serve as project coordinator.

Sincerely,

Norris Miner, Seminole Community College

Lester Ruth, Lake-Sumter Community College

John Nickens, IRC
The IRC Quality Indicators Project Committee

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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

INITIAL LETTER SENT TO ADMINISTRATORS

Demonstrating the "quality" of community college programs and services is a concern in Florida. However, little consensus exists regarding what indicates quality. As a response to this situation, a state-wide project has been designed to determine what information community college administrators perceive as useful in making quality-evaluation decisions. Your cooperation is important to the success of the project. An enclosure summarizes the project proposal.

Within a few weeks you will receive the survey questionnaire being used in this project. Questionnaires will be distributed through your college's project coordinator (a list of project coordinators is enclosed).

In advance, thank you for the investment of your time and effort which is essential to realize the full value of the project.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Les

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
The IRC Quality Indicators Project Committee

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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

LETTER TO PROJECT COORDINATOR DESCRIBING
THE DISTRIBUTION OF THE QUESTIONNAIRE

Enclosed are the IRC Program Quality Indicator Questionnaires for distribution to participants at your college. Preliminary letters explaining the project and soliciting their participation were sent to all identified project participants. Copies of these letters are enclosed for your information.

For your convenience, the enclosed questionnaires have been individually packaged and labeled. The trustee and advisory council members have had their questionnaire packages mailed directly to the address provided. Please distribute the questionnaire packages as soon as possible. Enclosed with each questionnaire is a cover letter describing the questionnaire and a return label with your address. The participants have been requested to complete and return the questionnaire to you within ten days. The IRC is interested in determining the response rate of questionnaires prior to follow up activities. Please forward those questionnaires which have been returned to your office within two weeks to the IRC. A copy of the project participants identified by your college is also enclosed.

The study participants have been requested to forward any questions regarding the project or the questionnaire through your office to the IRC. If you have any questions contact Bix Rathburn or Al Steuart at the IRC.

Enclosed are additional "Choice Guides" for use in the event those included with each questionnaire are misplaced.

Thank you again for your time and effort in this project.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Les

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
The IRC Quality Indicators Project Committee

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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

LETTER INCLUDED WITH QUESTIONNAIRE PACKAGE

Enclosed is the IRC's Program Quality Indicators Project Questionnaire. The questionnaire provides you an opportunity to share your opinions about the usefulness of various information in making program quality-evaluation decisions. As a lay advisor, you may not be directly involved in assessing the quality of programs. However, you opinions regarding what indicates program "quality" are of value to the college as your college, with other colleges in the state, seeks to determine what measures to use to demonstrate the quality of its programs and services.

The questionnaire is lengthy. The objective was to be comprehensive. Pilot study results indicate that responses proceed more rapidly after the first few items with a completion time of about an hour. Although completing the questionnaire in one session may be easier, it is not required. Please complete it within ten days. For return of the questionnaire, you may re-use the clasp envelope by affixing the enclosed label.

Your college should find the project's results valuable in the process of deciding what to use for demonstrating the "quality" of its programs or services. Publication of the project results is expected in January, 1982.

Please read carefully all questionnaire directions.

Thank you for your cooperation which is essential for realizing the full potential of this project.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Les

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

FIRST FOLLOW-UP LETTER

Recently you should have received the IRC's Program Quality Indicators Project Questionnaire. If you have not completed it, it will be appreciated if you will do so this week. To date, completed questionnaires from your college have been received from the persons indicated on the attached list.

To a large degree, program quality-evaluation decisions appear to involve standards which are held in people's minds. It is such standards "in people's minds" which the Questionnaire is seeking to tap, however imperfectly. This is valuable information to have for everyone involved in designing systems for demonstrating program quality. Please take about an hour of your time to share your opinions with other administrators regarding the usefulness in program quality-evaluation decision making of the information listed in the Questionnaire.

Please mail your completed questionnaire directly to the IRC. A mailing label is attached for your convenience.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Les

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
The IRC Quality Indicators Project Committee

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APPENDIX B (contunued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
florida community junior college inter-institutional research council

SECOND FOLLOW-UP LETTER

Enclosed please find another copy of the IRC's Program Quality Indicators Project Questionnaire. Due to increased interest in this project at both local and state levels, the participation of each administrator is important. The questionnaire provides you an opportunity to share your opinions about the usefulness of various information in making program quality-evaluation decisions.

Administrators should find the project's results valuable in the process of deciding what to use for demonstrating the "quality" of programs or services within their respective areas of responsibility. Publication of the project results is expected in January, 1982. To date responses have been received from 20 colleges with a 72% response rate for participating administrators.

The questionnaire is lengthy. The objective was to be comprehensive. Project results to date indicate that responses proceed more rapidly after the first few items with a completion time of about an hour. Although completing the questionnaire in one session may be easier, it is not required. Please complete it within ten days. For return of the questionnaire, you may re-use the clasp envelope by affixing the attached label.

Please read carefully all questionnaire directions.

Thank you for your cooperation which is essential for realizing the full potential of this project.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Les

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
The IRC Quality Indicators Project Committee

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APPENDIX B (continued)

IRC COOPERATION FOR PROGRESS THROUGH RESEARCH
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THANK YOU LETTER TO RESPONDENTS

Thank you for your time and effort devoted to completing the IRC's Program Quality Indicators Project Questionnaire. For almost all of the questionnaires returned to date, all of the responses requested were supplied. Such a response is taken as indicating a rather high-level interest in the subject of the project.

It is anticipated that the results of the project will be ready for publication in January, 1982. If you desire a copy, please inform the IRC.

Again, thank you for sharing your opinions regarding the degree of usefulness in making program quality-evaluation decisions of the various information contained in the Questionnaire.

Sincerely,

Norris Miner

Norris Miner, Seminole Community College

Les

Lester Ruth, Lake-Sumter Community College

John Nickens

John Nickens, IRC
The IRC Quality Indicators Project Committee

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APPENDIX C

QUESTIONNAIRE

PROGRAM QUALITY INDICATORS PROJECT QUESTIONNAIRE

STEP 1

Print or type:

YOUR NAME _____

YOUR POSITION _____

NAME OF COLLEGE _____

STEP 2

You may use various information (program characteristics) to evaluate the quality of academic or student support services programs. The purpose of this questionnaire is to determine your rating of the USEFULNESS of these characteristics in evaluating program quality. Rating choices are provided on a loose insert for quick reference.

The program characteristics are organized into four categories concerning information about:
I. Students II. Faculty/Staff III. Costs/Resources IV. General

In each category you are to rate each characteristic for DEGREE OF USEFULNESS in making QUALITY-EVALUATION DECISIONS about programs. Examples are given for each category.

Within each category space is provided for you to add characteristics. Rate any added characteristic in the same manner as described for other characteristics in the category.

SCAN THE ENTIRE QUESTIONNAIRE BEFORE YOU BEGIN RATING.

PLEASE USE A PENCIL FOR YOUR RESPONSES.

DIRECT ANY QUESTIONS REGARDING THE QUESTIONNAIRE THROUGH YOUR COLLEGE'S PROJECT COORDINATOR TO THE IRC.

STEP 3

In the list below, check one or more program areas to indicate the perspective you will use in rating the characteristics for degree of usefulness in making quality-evaluation decisions about programs.

___General (No specific program area in mind) ___Advanced and Professional

___Occupational ___Developmental ___Community Instructional Services

___Student Support Services ___Other: _____ (Please specify)

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CONTINUE ON NEXT PAGE

APPENDIX C (continued)

I. PROGRAM CHARACTERISTICS RELATING TO STUDENTS

STUDENT CLASSIFICATIONS

- ENTERING = students at the time they begin a program
- CURRENTLY ENROLLED = all students currently enrolled in a program, not just those beginning a program
- COMPLETERS = students who have received a degree or certificate, finished an orientation program, etc.
- LEAVERS = students who have withdrawn or otherwise left a program without officially completing it

* *

FOR EACH CHARACTERISTIC, IN EACH OF THE FOUR COLUMNS OF STUDENT CLASSIFICATIONS WRITE A NUMBER SELECTED FROM THE RATING CHOICES (LOOSE INSERT) TO INDICATE YOUR OPINION OF THAT CHARACTERISTIC'S USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS.

EXAMPLE

		entering	currently enrolled	completers	leavers
employment status	05	3	3	1	4

From the perspective checked in STEP 3:

The "3" in the "entering" column and the "3" in the "currently enrolled" column indicate an opinion that the information on employment status of ENTERING and CURRENTLY ENROLLED students has "some usefulness" in making quality-evaluation decisions about programs. The "1" in the "completers" column and the "4" in the "leavers" column indicate respectively the opinions that information on employment status of COMPLETERS is "essential" and of LEAVERS is of "little or no usefulness" (or "not applicable") in making quality-evaluation decisions about programs.

* *

CHARACTERISTICS		STUDENT CLASSIFICATIONS			
Percent or number of students by:		entering	currently enrolled	completers	leavers
sex classification	01	___	___	___	___
age classification	02	___	___	___	___
race classification	03	___	___	___	___
marital status	04	___	___	___	___
employment status	05	___	___	___	___
citizenship classification	06	___	___	___	___
household income classification	07	___	___	___	___
commuting distance categories	08	___	___	___	___
educational status of family	09	___	___	___	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

(CONTINUE RATING EACH STUDENT-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		STUDENT CLASSIFICATIONS			
Percent or number of students by:		entering	currently enrolled	completers	leavers
military service classification	10	___	___	___	___
language spoken in home	11	___	___	___	___
parents' occupational categories	12	___	___	___	___
source of financial support	13	___	___	___	___
type of handicap	14	___	___	___	___
career decision status	15	___	___	___	___
major area of study	16	___	___	___	___
type of high school diploma	17	___	___	___	___
degree level sought	18	___	___	___	___
part time/full time classification	19	___	___	___	___
number of hours enrolled	20	___	___	___	___
number of hours completed	21	___	___	___	___
number of hours withdrawn	22	___	___	___	___
number of hours incomplete	23	___	___	___	___
number of hours with failing grade	24	___	___	___	___
number of hours of developmental/ remedial work	25	___	___	___	___
number of hours repeated	26	___	___	___	___
term GPA categories	27	___	___	___	___
cumulative GPA categories	28	___	___	___	___
cumulative GPA categories for program related course work	29	___	___	___	___
number of CLEP hours earned	30	___	___	___	___
amount of time since last formal educational experience	31	___	___	___	___
level of previous academic achievement	32	___	___	___	___
number of years of related work	33	___	___	___	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

(CONTINUE RATING EACH STUDENT-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		STUDENT CLASSIFICATIONS			
Percent or number of students by:		entering	currently enrolled	completers	leavers
level of awareness of college's programs, services, etc.	34	___	___	___	___
I.Q. categories	35	___	___	___	___
personality types	36	___	___	___	___
self-concept categories	37	___	___	___	___
test anxiety levels	38	___	___	___	___
level of financial assistance desired	39	___	___	___	___
types of developmental or remedial assistance desired	40	___	___	___	___
level of public service involvement (however measured)	41	___	___	___	___
level of involvement in high school activities	42	___	___	___	___
academic skills level as measured by local instruments	43	___	___	___	___
academic skills level as measured by state instruments	44	___	___	___	___
academic skills level as measured by national instruments	45	___	___	___	___
scholastic honors, awards, or memberships earned (scholarships, honorary societies, etc.)	46	___	___	___	___
holding jobs for which trained	47	___	___	___	___
salary categories	48	___	___	___	___
rate or number of legal violations	49	___	___	___	___
time spent in program	50	___	___	___	___
number of jobs held since leaving program	51	___	___	___	___
performance on standardized state tests	52	___	___	___	___
performance on standardized national tests	53	___	___	___	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

(CONTINUE RATING EACH STUDENT-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		STUDENT CLASSIFICATIONS			
Percent or number of students by:		entering	currently enrolled	completers	leavers
use of various student services	54	___	___	___	___
need for various student services	55	___	___	___	___
PLEASE NOTE FOR THE FOLLOWING CHARACTERISTICS A SINGLE STUDENT CLASSIFICATION IS IMPLIED					
Number of students enrolling in a program	56	___	X	X	X
Percent of total college FTE in program	57	X	___	X	X
Percent of total college unduplicated headcount in program	58	X	___	X	X
Average GPA of students in program	59	X	___	X	X
Average course load for students in program	60	X	___	X	X
Number or percent of students completing a program	61	X	X	___	X
Average time taken for completion of a program	62	X	X	___	X
Percent or number of students taking state board or licensure exams	63	X	X	___	X
Percent or number of students passing state board or licensure exams	64	X	X	___	X
Percent or number of students by type of license, certificate or registration received	65	X	X	___	X
Percent or number of students withdrawing from a program	66	X	X	X	___
_____	Other	___	___	___	___
_____	Other	___	___	___	___
_____	Other	___	___	___	___
_____	Other	___	___	___	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

THE FOLLOWING CHARACTERISTICS RELATE TO STUDENTS WHO HAVE TRANSFERRED OR ARE NATIVE TO FOUR-YEAR COLLEGES OR UNIVERSITIES.

STUDENT CLASSIFICATIONS
- NATIVE STUDENTS
- TRANSFERS WITH ASSOCIATE DEGREE
- TRANSFERS WITHOUT ASSOCIATE DEGREE

CONTINUE RATING EACH STUDENT-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING PROGRAM QUALITY-EVALUATION DECISIONS FROM PERSPECTIVE CHECKED IN STEP 3.

CHARACTERISTIC		STUDENT CLASSIFICATIONS		
Percent or number of students by:		native students	transfer with assoc. degree	transfer without assoc. degree
enrollment in a four-year institution	67	___	___	___
type of college or university entered	68	___	___	___
name of university or college in which enrolled	69	___	___	___
number of hours transferred	70	___	___	___
upper division entering term GPA categories	71	___	___	___
upper division cumulative term GPA categories	72	___	___	___
upper division current term GPA categories	73	___	___	___
GPA per discipline area	74	___	___	___
GPA per type of course	75	___	___	___
academic major	76	___	___	___
number of times changed major	77	___	___	___
completing a four-year degree	78	___	___	___
time taken for completion of four-year degree	79	___	___	___
entering graduate school	80	___	___	___
average GPA	81	___	___	___
average course load	82	___	___	___

CONTINUE IN NEXT PAGE

APPENDIX C (continued)

(CONTINUE RATING EACH STUDENT-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		STUDENT CLASSIFICATIONS		
Percent or number of students by:		native students	transfer with assoc. degree	transfer without assoc. degree
_____	Other	___	___	___
_____	Other	___	___	___
_____	Other	___	___	___
_____	Other	___	___	___

II. PROGRAM CHARACTERISTICS RELATING TO FACULTY/STAFF

* * * \

APPENDIX C (continued)

(CONTINUE RATING EACH FACULTY/STAFF-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		FACULTY/STAFF CLASSIFICATIONS	
Percent or number of Faculty/Staff by:		part-time	full-time
sex categories	12	___	___
age categories	13	___	___
race categories	14	___	___
type of language spoken	15	___	___
level of research activity	16	___	___
level of publication activity	17	___	___
level of participation in professional organizations	18	___	___
level of use of alternative instructional methods	19	___	___
level of participation in college governance	20	___	___

CHARACTERISTICS		FACULTY/STAFF CLASSIFICATIONS	
Percent or number of Faculty/Staff by:		part-time	full-time
level of participation in program decision-making	21	___	___
level of involvement in campus extracurricular activities	22	___	___
level of public service	23	___	___
rate of faculty/staff turnover	24	___	___
_____	Other	___	___
_____	Other	___	___
_____	Other	___	___
_____	Other	___	___

FOR THE FOLLOWING FACULTY/STAFF RELATED PROGRAM CHARACTERISTICS, THE FULL-TIME/PART-TIME CLASSIFICATIONS DO NOT APPLY. SIMPLY RATE EACH CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS.

ratio of part-time to full-time faculty/staff	25	___	ratio of faculty to student support staff	27	___
ratio of faculty/staff to clerical staff	26	___	ratio of faculty/staff to administrative personnel	28	___
_____	Other	___	_____	Other	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

III. PROGRAM CHARACTERISTICS RELATING TO COSTS AND RESOURCES

* *

FOR EACH CHARACTERISTIC, IN EACH OF THE THREE COLUMNS OF REPORTING CLASSIFICATIONS WRITE A NUMBER SELECTED FROM THE RATING CHOICES (LOOSE INSERT) TO INDICATE YOUR OPINION OF THAT CHARACTERISTIC'S USEFULNESS IN MAKING QUALITY-EVALUATION DECISIONS ABOUT PROGRAMS FROM THE PERSPECTIVE CHECKED IN STEP 3.

EXAMPLE

		per program FTE	per program unduplicated headcount	per total program
cost of materials	03	2	1	1

From the perspective checked in STEP 3:

The "2" in the "per program FTE" column indicates an opinion that information on cost of materials PER PROGRAM FTE is "very useful" in making program quality-evaluation decisions. In the next two columns, the "1" indicates an opinion that information on cost of materials PER PROGRAM UNDUPLICATED HEADCOUNT and PER TOTAL PROGRAM is "essential" in making program quality-evaluation decisions.

* *

CHARACTERISTICS		REPORTING CLASSIFICATIONS per program FTE	per program unduplicated headcount	per total program
total cost	01	___	___	___
cost of instructional personnel	02	___	___	___
cost of materials	03	___	___	___
cost of equipment maintenance	04	___	___	___
cost of space utilized	05	___	___	___
cost of support services	06	___	___	___
cost of program administration	07	___	___	___
cost of needs assessment or other necessary research	08	___	___	___
cost of program evaluation	09	___	___	___
cost of accreditation studies	10	___	___	___
space utilization	11	___	___	___
equipment utilization	12	___	___	___
number of library holdings	13	___	___	___
number of support staff	14	___	___	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

(CONTINUE RATING EACH COSTS/RESOURCES-RELATED PROGRAM CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING PROGRAM QUALITY-EVALUATION DECISIONS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		REPORTING CLASSIFICATIONS: per program FTE	per program unduplicated headcount	per total program
_____	Other	___	___	___
_____	Other	___	___	___
_____	Other	___	___	___
_____	Other	___	___	___

IV. PROGRAM CHARACTERISTICS RELATING TO GENERAL INFORMATION

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APPENDIX C (continued)

(CONTINUE RATING EACH GENERAL INFORMATION-RELATED CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING PROGRAM QUALITY-EVALUATION DECISIONS FROM PERSPECTIVE CHECKED IN STEP 3.)

CHARACTERISTICS		RATING SOURCE ALTERNATIVES — RATINGS BY: currently enrolled students	program completers	program leavers	faculty/ staff	community (general)
Ratings of:						
support services	06	___	___	___	___	___
usefulness of student services	07	___	___	___	___	___
accessibility of student services	08	___	___	___	___	___
ease of use of student services	09	___	___	___	___	___
_____	Other	___	___	___	___	___
_____	Other	___	___	___	___	___
_____	Other	___	___	___	___	___
_____	Other	___	___	___	___	___

FOR THE FOLLOWING CHARACTERISTICS, SIMPLY RATE EACH CHARACTERISTIC FOR DEGREE OF USEFULNESS IN MAKING PROGRAM QUALITY-EVALUATION DECISIONS FROM PERSPECTIVE CHECKED IN STEP 3.

employer opinion of program completers	10	___	number/types of changes as a result of program evaluation	20	___
employer opinion of program non-completers	11	___	number/types of changes as a result of accreditation studies	21	___
job satisfaction ratings by completers	12	___	level of demand for program/ service by students	22	___
job satisfaction ratings by non-completers	13	___	level of demand for program/ service in service area	23	___
ratings by external consultants	14	___	level of demand for program/ service in state	24	___
ratings by certification boards	15	___	level of demand for program/ service in nation	25	___
ratings by accreditation agencies	16	___	_____	Other	___
number of alternative educational methods offered	17	___	_____	Other	___
program admission requirements	18	___	_____	Other	___
clearly stated program objectives	19	___	_____	Other	___

CONTINUE ON NEXT PAGE

APPENDIX C (continued)

STEP 4: Please provide the following information.

Years in present position: ____ Years at present college: ____

Years in community college education: ____

Years in education other than community college education: ___

Birthdate: ____/____/____ Sex: __female __male
(mo) (da) (yr)

Highest degree held: __bachelor __master __specialist __doctorate

STEP 5: Please indicate your opinions of the following.

OPINION CHOICES
1 = NONE ("None of my activities or time")
2 = LITTLE ("Less than one-fourth but more than none of my activities or time")
3 = SOME ("One-fourth or more but less than three-fourths of my activities or time")
4 = CONSIDERABLE ("Three-fourths or more but less than all of my activities or time")
5 = ALL(TOTAL) ("100% of my activities or time")

Using one of the OPINION CHOICES listed above, indicate your perception of:

- the degree to which your POSITION is associated with each program area:

__Advanced and Professional __Community Instructional Services

__Developmental __Occupational __Student Support Services

- the amount of TIME you spend in program quality-evaluation activities:____

- the extent of your INVOLVEMENT in program quality-evaluation decision-making at your institution: ____

Please indicate your perception of your LEVEL OF EXPERIENCE in program quality-evaluation decision-making by checking one of the following:

__NONE __LITTLE __SOME __CONSIDERABLE

PLEASE ADD ANY COMMENTS REGARDING THE PROGRAM QUALITY-EVALUATION PROCESS AT YOUR COLLEGE OR ANY COMMENTS ABOUT THIS QUESTIONNAIRE (ATTACH ADDITIONAL PAGE IF REQUIRED).

STEP 6: Please return this questionnaire to the project coordinator at your college. Thank you for the expenditure of your time and energy on this project.

APPENDIX C (continued)

RATING CHOICES

1 = ESSENTIAL	("I do not see how I could make a judgment about the quality of a program without considering this characteristic")
2 = VERY USEFUL	("I would feel hindered in making a judgment about the quality of a program without considering this characteristic, but I would make a judgment without it")
3 = SOME USEFULNESS	("Although I would like to consider this characteristic in making a judgment about the quality of a program, I would not feel hindered in making a judgment without it")
4 = LITTLE OR NO USEFULNESS	("I probably would not consider this characteristic in arriving at a judgment of the quality of a program")

Please rate any "Not Applicable" judgments with a "4".

APPENDIX D

POSITION CODES WITH FREQUENCIES USED IN THE CATEGORIZATION OF RESPONDENTS BY ADMINISTRATIVE AREA AND PROGRAM AREA

Position Code	Title	Frequency
01	President	13
02	Executive Vice President	9
03	Provost/Center Director	24
04	Assistant to the President	4
05	Research and Planning	10
06	Development	8
07	Special Services	8
08	EA/EO Coordinator	8
09	Special Projects	7
10	Public Relations	3
11	Management Information Systems	5
12	Other General Administration	3
13	Chief Academic Officer	30
14	Program Director-Communications	12
15	Program Director-Mathematics	13
16	Program Director-Sciences	8
17	Program Director-Humanities	10
18	Program Director-Fine Arts	2
19	Program Director-Business	20
20	Program Director-Social Sciences	10

APPENDIX D (continued)

Position Code	Title	Frequency
21	Program Director-Industrial	9
22	Program Director-Allied Health	23
23	Program Director-Law Enforcement	2
24	Program Director-Other Technical Education	14
25	Program Director-Other Occupational Education	15
26	Program Director-Other General Education	10
27	Director CETA/Cooperative Education	1
28	Instructional Resources	23
29	Director-Continuing Education/Community Instructional Services	21
30	Developmental Education	5
31	Other Academic Affairs	3
32	Chief Student Affairs Officer	36
33	Financial Aid	11
34	Counseling	10
35	Admissions	7
36	Veterans' Affairs	2
37	Registrar	11
38	Placement & Follow-up	2
39	Student Activities	3
40	Athletics	2
41	Other Student Affairs	4
42	Chief Business Affairs Officer	6
43	Budget	3
44	Purchasing	1
45	Personnel	8

APPENDIX D (continued)

Position Code	Title	Frequency
46	Accounting	3
47	Physical Plant	2
48	Auditor	3
49	Data Processing	3
50	Other Business Affairs	0

APPENDIX E

RANKS AND MEANS FOR ALL PROGRAM CHARACTERISTICS FOR ALL RESPONDENTS AND BY PROGRAM AREA

All (N=450)		Program Areas (N=262)										Program Characteristics
		Advan. & Prof. (N=65)		Occup. (N=83)		Develop. (N=5)		Comm. Instr. Serv. (N=21)		Stu. Serv. (N=88)		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
1	1.38	2	1.44	7	1.43	1.5	1.00	1	1.38	3	1.39	Total cost of program
2	1.42	4	1.40	2	1.23	12.5	1.40	7	1.62	18	1.55	Ratings of program curriculum by program completers
3	1.43	15	1.54	1	1.21	162.5	2.60	11	1.71	11	1.47	Employer opinion of program completers
4	1.44	3	1.39	3	1.28	19	1.50	13	1.75	4	1.42	Number or percent of students completing a program
5	1.45	21	1.61	4	1.34	4.5	1.20	2	1.43	16	1.53	Clearly stated program objectives
6	1.47	7	1.43	9	1.46	1.5	1.00	8.5	1.67	22.5	1.58	Cost of instructional personnel per total program
7	1.51	6	1.41	27	1.59	76.5	2.00	37	2.05	14	1.50	Total cost per program FTE
8	1.51	23.5	1.63	15	1.49	27	1.60	4.5	1.52	11	1.47	Level of demand for program/service in service area
9	1.52	1	1.28	26	1.58	12.5	1.40	64	2.26	15	1.51	Number or percent of fulltime faculty/staff by degrees held
10	1.53	5	1.41	5	1.38	76.5	2.00	3	1.45	17	1.54	Number of students enrolling in a program
11	1.53	10	1.49	13	1.49	76.5	2.00	16	1.82	7	1.44	Number or percent of students withdrawing from a program
12	1.54	55.5	1.79	8	1.43	294	3.25	23	1.95	9	1.45	Number or percent of students passing state board or licensure exams
13	1.54	19	1.60	6	1.41	4.5	1.20	11	1.71	22.5	1.58	Cost of materials per total program
14	1.54	18	1.59	11.5	1.48	12.5	1.40	4.5	1.52	8	1.44	Level of demand for program/service by students
15	1.60	13	1.52	33	1.63	76.5	2.00	45.5	2.10	33	1.71	Cost of instructional personnel per program FTE
16	1.62	30	1.67	43	1.69	47	1.80	42	2.10	1	1.33	Ratings of accessibility of student services by currently enrolled students
17	1.62	12	1.50	42	1.68	76.5	2.00	29.5	2.00	19	1.56	Total cost of program per unduplicated headcount
18	1.67	31.5	1.68	10	1.47	27	1.60	8.5	1.67	87	1.93	Ratings of program facilities/equipment by faculty/staff
19	1.67	63	1.81	11.5	1.48	47	1.80	18.5	1.86	50	1.79	Ratings of program facilities/equipment by program completers
20	1.68	37.5	1.70	63	1.79	47	1.80	42	2.10	2	1.36	Ratings of ease of use of student services by currently enrolled students
21	1.68	22	1.62	18	1.51	226.5	3.00	14.5	1.81	29	1.69	Job satisfaction ratings by program completers
22	1.68	23.5	1.63	15	1.49	47	1.80	64	2.26	34.5	1.71	Number or percent of fulltime faculty/staff by number of students per term
23	1.68	29	1.66	22	1.53	12.5	1.40	6	1.57	103.5	1.95	Ratings of program instructional strategies by faculty/staff
24	1.69	13	1.51	20.5	1.52	47	1.80	64	2.26	25	1.62	Number or percent of fulltime faculty/staff by years taught/ service
25	1.69	33.5	1.69	58.5	1.76	47	1.80	80	2.35	5.5	1.43	Ratings of usefulness of student services by currently enrolled students
26	1.69	26	1.65	18	1.51	27	1.60	39	2.05	39	1.74	Number or percent of fulltime faculty/staff by average class size
27	1.69	20	1.60	23	1.54	4.5	1.20	56.5	2.21	31	1.70	Number or percent of fulltime faculty/staff by number of student contact hours per term
28	1.69	64.5	1.81	39	1.67	12.5	1.40	18.5	1.86	24	1.60	Cost of program administration per total program

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
29	1.71	69	1.83	53.5	1.74	12.5	1.40	25.5	1.95	26	1.63	Cost of support services per total program
30	1.72	25	1.65	25	1.57	76.5	2.00	145	2.63	27	1.67	Number or percent of fulltime faculty/staff by number of course hours per term
31	1.73	16	1.57	60.5	1.78	105.5	2.20	33.5	2.05	37.5	1.73	Cost of instructional personnel per program unduplicated headcount
32	1.73	11	1.49	30	1.62	27	1.60	117	2.53	32	1.70	Number or percent of fulltime faculty/staff by length of service in program
33	1.73	17	1.58	64.5	1.80	76.5	2.00	25.5	1.95	45.5	1.78	Number or percent of parttime faculty/staff by degrees held
34	1.74	40	1.71	35	1.64	27	1.60	48.5	2.14	36	1.72	Ratings of program staff by program completers
35	1.75	62	1.80	38	1.65	294	3.25	71	2.30	44	1.78	Number or percent of program completers by type of license, certificate or registration received
36	1.75	129	2.03	60.5	1.78	47	1.80	67.5	2.29	5.5	1.43	Ratings of accessibility of student services by program completers
37	1.75	58	1.79	49.5	1.73	27	1.60	33.5	2.05	48.5	1.79	Number of support staff per total program
38	1.76	31.5	1.68	24	1.55	27	1.60	18.5	1.86	91.5	1.93	Ratings of program administration by faculty/staff
39	1.76	91.5	1.91	69	1.82	47	1.80	93.5	2.40	13	1.48	Ratings of usefulness of student services by program completers
40	1.76	82.5	1.88	28	1.61	294	3.25	37	2.05	55.5	1.82	Number or percent of program completers taking state board or licensure exams
41	1.76	27.5	1.66	56.5	1.75	76.5	2.00	37	2.05	77.5	1.91	Cost of materials per program FTE
42	1.78	99	1.94	18	1.51	12.5	1.40	21.5	1.90	99.5	1.94	Ratings of program instructional strategies by program completers
43	1.78	2	1.38	40	1.67	47	1.80	222	2.95	58	1.82	Ratio of parttime to fulltime faculty/staff
44	1.78	45	1.76	44	1.70	4.5	1.20	48.5	2.14	48.5	1.79	Cost of equipment maintenance per total program
45	1.78	77	1.86	32	1.63	162.5	2.60	71	2.30	83	1.92	Ratings by accreditation agencies
46	1.79	75.5	1.85	37	1.65	76.5	2.00	56.5	2.21	43	1.77	Number or percent of fulltime faculty/staff by productivity ratio
47	1.79	33.5	1.69	41	1.68	76.5	2.00	95	2.42	28	1.67	Number or percent of fulltime faculty/staff by rate of faculty/staff turnover
48	1.79	39	1.70	53.5	1.74	76.5	2.00	42	2.10	41.5	1.77	Cost of materials per program unduplicated headcount
49	1.80	58	1.79	35	1.64	47	1.80	18.5	1.86	77.5	1.81	Number or percent of parttime faculty/staff by average class size
50	1.80	129	2.03	82	1.88	47	1.80	75.5	2.33	11	1.47	Ratings of ease of use of student services by program completers
51	1.81	42	1.73	45	1.71	76.5	2.00	126.5	2.57	63.5	1.86	Equipment utilization per total program
52	1.81	109	1.97	15	1.49	27	1.60	14.5	1.81	144	2.08	Ratings of a program curriculum by faculty/staff
53	1.82	43	1.73	53.5	1.74	105.5	2.20	25.5	1.95	105.5	1.95	Ratings of support services by faculty/staff
54	1.83	86	1.89	47	1.71	268	3.20	29.5	2.00	105.5	1.95	Ratings by certification boards
55	1.84	44	1.75	71	1.83	194.5	2.80	87.5	2.38	47	1.78	Program admission requirements
56	1.84	48	1.79	35	1.64	76.5	2.00	42	2.09	87	1.93	Number or percent of parttime faculty/staff by number of students per term
57	1.84	106	1.95	20.5	1.52	268	3.20	75.5	2.33	71	1.87	Number or percent of program completers holding jobs for which trained
58	1.85	8	1.43	97	1.93	27	1.60	117	2.53	34.5	1.71	Number or percent of fulltime faculty/staff by certification/rank

APPENDIX E (continued)

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
59	1.85	75.5	1.85	58.5	1.76	47	1.80	33.5	2.05	87	1.93	Ratings of program facilities/equipment by currently enrolled students
60	1.85	129	2.03	74	1.85	27	1.60	113	2.52	20.5	1.58	Ratings of support services by program completers
61	1.86	142	2.08	82	1.88	12.5	1.40	87.5	2.38	20.5	1.58	Ratings of support services by currently enrolled students
62	1.87	81	1.87	56.5	1.75	47	1.80	87.5	2.38	67.5	1.86	Level of demand for program/service in state
63	1.88	51	1.78	99.5	1.95	76.5	2.00	71	2.30	52	1.80	Cost of program administration per program FTE
64	1.88	80	1.87	67	1.81	12.5	1.40	33.5	2.05	73	1.89	Number/types of changes as a result of program evaluation
65	1.89	61	1.80	49.5	1.73	12.5	1.40	21.5	1.90	164.5	2.15	Ratings of program staff by faculty/staff
66	1.89	109	1.97	67	1.81	27	1.60	59.5	2.24	81.5	1.92	Ratings of program staff by currently enrolled students
67	1.90	51	1.78	47	1.71	130.5	2.40	161	2.74	109	1.96	Number or percent of fulltime faculty/staff by level of use of alternative instructional methods
68.5	1.90	53.5	1.78	29	1.61	76.5	2.00	117	2.53	69	1.87	Number or percent of fulltime faculty/staff by level of participation in program decision-making
68.5	1.90	73	1.84	117	2.02	105.5	2.20	51	2.15	70	1.87	Cost of support services per program FTE
70	1.90	91.5	1.91	47	1.71	12.5	1.40	48.5	2.14	111.5	1.97	Number or percent of parttime faculty/staff by number of student contact hours per term
71	1.90	115	1.98	51	1.74	105.5	2.20	29.5	2.00	96.5	1.94	Number or percent of parttime faculty/staff by productivity ratio
72	1.90	100	1.94	92	1.93	27	1.60	59.5	2.24	45.5	1.78	Cost of space utilized per total program
73	1.90	64.5	1.81	77	1.87	130.5	2.40	87.5	2.38	98	1.94	Space utilization per total program
74	1.91	46	1.77	113	2.00	76.5	2.00	126.5	2.57	76	1.90	Number or percent of entering students by types of developmental or remedial assistance desired
75	1.92	90	1.91	119.5	2.02	105.5	2.20	67.5	2.29	37.5	1.73	Cost of support services per program unduplicated headcount
76	1.92	113	1.97	64.5	1.80	47	1.80	67.5	2.29	53.5	1.81	Number or percent of entering students by type of handicap
77	1.92	41	1.72	111	1.99	47	1.80	165	2.76	93	1.93	Number or percent of entering students by academic skills level as measured by local instruments
78	1.93	71	1.83	31	1.62	358	3.60	139	2.62	71	1.83	Number or percent of entering students by major area of study
79	1.94	97.5	1.93	92	1.93	76.5	2.00	113	2.52	41.5	1.77	Cost of program administration per program unduplicated headcount
80	1.95	49	1.78	86	1.89	47	1.80	199.5	2.89	80	1.92	Number or percent of fulltime faculty/staff by number of FTE per term
81	1.95	115	1.98	70	1.82	47	1.80	53.5	2.19	147.5	2.09	Ratings of program instructional strategies by currently enrolled students
82	1.95	53.5	1.78	53.5	1.74	358	3.60	148.5	2.67	57	1.82	Number or percent of currently enrolled students by major area of study
83	1.96	36	1.70	79	1.87	145	2.50	93.5	2.40	127	2.01	Number or percent of program completers by average time taken for completion of a program
84	1.97	109	1.97	75.5	1.86	46	1.80	146	2.65	99.5	1.94	Number/types of changes as a result of accreditation studies
85	1.97	66.5	1.81	88	1.90	76.5	2.00	11	1.71	111.5	1.97	Number or percent of parttime faculty/staff by years taught/service

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
86	1.98	88	1.89	111	1.99	105.5	2.20	157	2.71	119.5	2.00	Number or percent of currently enrolled students by types of developmental or remedial assistance desired
87	1.98	120.5	2.00	62	1.78	162.5	2.60	99.5	2.43	119.5	2.00	Number or percent of parttime faculty/staff by number of course hours taught per term
88	1.99	55.5	1.79	106.5	1.99	226.5	3.00	216.5	2.95	75	1.89	Number or percent of currently enrolled students by average GPA of students in program
89	1.99	51	1.78	102.5	1.96	76.5	2.00	132.5	2.60	130	2.02	Cost of equipment maintenance per program FTE
90	1.99	60	1.80	80	1.88	76.5	2.00	29.5	2.00	132	2.03	Number or percent of parttime faculty/staff by length of service in a program
91	1.99	103	1.95	106.5	1.99	226.5	3.00	110	2.50	107	1.96	Number or percent of currently enrolled students by percent of total college FTE in program
92	2.00	126.5	2.03	86	1.89	318	3.40	175.5	2.81	65.5	1.86	Number or percent of currently enrolled students by number of hours with failing grade
93	2.00	120.5	2.00	84	1.88	268	3.20	315.5	3.16	65.5	1.86	Number or percent of currently enrolled students by cumulative GPA categories for program-related coursework
94	2.00	135	2.05	90	1.92	47	1.80	25.5	1.95	138	2.06	Ratings of a program curriculum by currently enrolled students
95	2.01	95.5	1.92	137.5	2.11	76.5	2.00	120	2.56	124	2.01	Number of support staff per program FTE
96	2.01	72	1.84	98	1.95	105.5	2.20	157	2.71	114.5	1.99	Equipment utilization per program unduplicated headcount
97	2.02	94	1.92	101	1.96	194.5	2.80	260.5	3.05	140	2.06	Number of library holdings per total program
98	2.02	140.5	2.08	75.5	1.86	47	1.80	87.5	2.38	91.5	1.93	Number or percent of currently enrolled students by type of handicap
99	2.03	136	2.05	133	2.07	105.5	2.20	126.5	2.56	63.5	1.86	Number of support staff per program unduplicated headcount
100	2.03	143.5	2.08	86	1.89	27	1.60	126.5	2.56	131	2.03	Ratings of program administration by program completers
101	2.03	37.5	1.70	104.5	1.98	76.5	2.00	184	2.85	164.5	2.15	Equipment utilization per program FTE
102	2.03	106	1.95	111	1.99	162.5	2.60	166	2.76	116	1.99	Number or percent of entering students by level of previous academic achievement
103	2.03	27.5	1.66	129	2.07	76.5	2.00	62	2.25	119.5	2.00	Number or percent of parttime faculty/staff by certification/rank
104	2.04	132	2.04	145	2.13	145	2.50	80	2.35	55.5	1.82	Number or percent of currently enrolled students by percent of total college unduplicated headcount in program
105	2.04	161	2.14	123	2.05	105.5	2.20	45.5	2.10	101	1.94	Ratings of usefulness of student services by faculty/staff
106	2.05	131	2.03	67	1.81	130.5	2.40	99.5	2.43	186	2.21	Number or percent of parttime faculty/staff by level of use of alternative instructional methods
107	2.05	95.5	1.92	92	1.93	76.5	2.00	82	2.37	102	1.95	Number or percent of fulltime faculty/staff by level of compensation
108	2.05	35	1.69	137.5	2.11	130.5	2.40	209	2.91	144	2.08	Number or percent of currently enrolled students by academic skills level as measured by local instruments
109	2.06	147.5	2.11	124	2.06	226.5	3.00	281.5	3.10	40	1.75	Number or percent of currently enrolled students by cumulative GPA categories

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
110	2.06	154.5	2.13	117	2.02	105.5	2.20	53.5	2.19	119.5	2.00	Ratings of accessibility of student services by faculty/staff
111	2.07	74	1.85	95.5	1.94	268	3.20	175.5	2.81	136.5	2.05	Number or percent of program completers by major area of study
112	2.07	97.5	1.93	119.5	2.02	76.5	2.00	157	2.71	114.5	1.99	Cost of equipment maintenance per program unduplicated headcount
113	2.07	194	2.25	166.5	2.20	162.5	2.60	87.5	2.38	53.5	1.81	Ratings of accessibility of student services by program leavers
114	2.07	47.5	1.77	147.5	2.13	162.5	2.60	222	2.95	170	2.16	Number or percent of entering students by academic skills level as measured by state instruments
115	2.07	93	1.91	142.5	2.12	226.5	3.00	209	2.90	128	2.02	Number or percent of currently enrolled students by number of hours of developmental/remedial work
116	2.08	147.5	2.11	99.5	1.95	105.5	2.20	42	2.10	175	2.18	Number or percent of program completers by employment status
117	2.08	66.5	1.81	137.5	2.11	105.5	2.20	132.5	2.60	164.5	2.15	Space utilization per program FTE
118	2.09	79	1.87	144	2.12	130.5	2.40	126.5	2.57	119.5	2.00	Space utilization per program unduplicated headcount
119	2.09	78	1.86	108.5	1.99	162.5	2.60	175.5	2.81	96.5	1.94	Ratio of faculty to student support staff
120	2.09	143.5	2.08	212	2.38	194.5	2.80	303.5	3.14	95	1.94	Number or percent of students transferring with associate degree by completing a four-year degree
121	2.09	88	1.89	157.5	2.18	162.5	2.60	260.5	3.05	141	2.07	Number or percent of entering students by academic skills level as measured by national instruments
122	2.09	123	2.02	162	2.19	130.5	2.40	105	2.45	87	1.93	Cost of space utilized per program FTE
123	2.10	125	2.02	125.5	2.06	12.5	1.40	59.5	2.24	129	2.02	Cost of needs assessment or other necessary research per total program
124	2.10	102	1.94	94	1.93	226.5	3.00	238.5	3.00	74	1.89	Number or percent of entering students by degree level sought
125	2.11	162.5	2.14	82	1.88	47	1.80	99.5	2.43	150.5	2.10	Cost of program evaluation per total program
126	2.11	213	2.30	102.5	1.96	130.5	2.40	80	2.35	60	1.83	Number or percent of entering students by level of awareness of college's programs, services, etc.
127	2.11	194	2.25	203	2.34	130.5	2.40	87.5	2.38	51	1.80	Ratings of ease of use of student services by program leavers
128	2.12	111	1.97	147.5	2.13	226.5	3.00	294	3.11	147.5	2.09	Number or percent of program completers by cumulative GPA categories for program related course work
129	2.11	126.5	2.03	89	1.91	105.5	2.20	192	2.86	110	1.96	Ratio of faculty/staff to administrative personnel
130	2.12	182	2.22	140	2.11	105.5	2.20	53.5	2.19	119.5	2.00	Ratings of ease of use of student services by faculty/staff
131	2.12	117	1.98	114.5	2.01	76.5	2.00	201.5	2.90	177.5	2.19	Number or percent of parttime faculty/staff by number of FTE per term
132	2.12	115	1.98	216	2.40	268	3.20	345.5	3.24	108	1.96	Number or percent of students transferring with associate degree by enrollment in a four-year institution
133	2.13	118.5	1.98	147.5	2.13	318	3.40	175.5	2.81	144	2.08	Number or percent of program leavers by number of hours with failing grade
134	2.14	82.5	1.88	141	2.12	226.5	3.00	271.5	3.05	159	2.13	Number or percent of currently enrolled students by average course load for students in program
135	2.14	177	2.21	121	2.03	130.5	2.40	59.5	2.24	167	2.15	Number or percent of parttime faculty/staff by rate of faculty/staff turnover

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
136.5	2.15	186	2.23	95.5	1.94	130.5	2.40	126.5	2.57	87	1.93	Number or percent of currently enrolled students by career decision status
136.5	2.15	186	2.23	129	2.07	226.5	3.00	303.5	3.14	81.5	1.92	Number or percent of currently enrolled students by self-concept categories
138	2.15	147.5	2.11	133	2.07	76.5	2.00	99.5	2.43	156	2.12	Number or percent of program completers by career decision status
139	2.15	151	2.11	164	2.20	130.5	2.40	126.5	2.57	87	1.93	Cost of space utilized per program unduplicated headcount
140	2.15	118.5	1.98	104.5	1.98	226.5	3.00	238.5	3.00	113	1.97	Number or percent of currently enrolled students by degree level sought
141.5	2.15	209.5	2.29	72	1.84	130.5	2.40	87.5	2.38	103.5	1.95	Number or percent of entering students by career decision status
141.5	2.15	207	2.28	194	2.31	194.5	2.80	120	2.55	62	1.84	Ratings of usefulness of student services by program leavers
143	2.16	84.5	1.88	73	1.84	76.5	2.00	184	2.85	153	2.11	Ratio of faculty/staff to clerical staff
144	2.16	197.5	2.26	239	2.48	162.5	2.60	139	2.62	30	1.70	Number of percent of currently enrolled students by need for various student services
145	2.16	164	2.15	282	2.63	268	3.20	260.5	3.05	72	1.88	Number or percent of students transferring with associate degree by average GPA
146	2.16	150	2.11	259	2.55	318	3.40	281.5	3.10	125	2.01	Number or percent of students transferring with associate degree by upper division cumulative term GPA categories
147	2.17	147.5	2.11	182.5	2.27	194.5	2.80	260.5	3.05	136.5	2.05	Number or percent of program completers by cumulative GPA categories
148	2.17	157.5	2.13	205	2.36	394.5	3.80	238.5	3.00	134.5	2.04	Number or percent of students transferring with associate degree by academic major
149	2.17	196	2.25	173	2.23	268	3.20	53.5	2.19	193	2.24	Employer opinion of program non-completers
150	2.17	228	2.34	122	2.04	130.5	2.40	105	2.45	87	1.93	Number or percent of currently enrolled students by level of awareness of college's programs, services, etc.
151	2.17	170	2.17	129	2.07	27	1.60	75.5	2.33	187	2.22	Ratings of program administration by currently enrolled students
152	2.18	139	2.07	152	2.16	268	3.20	281.5	3.10	164.5	2.15	Number of library holdings per program unduplicated headcount
153	2.18	137.5	2.06	142.5	2.12	226.5	3.00	192	2.86	179	2.19	Number or percent of entering students by number of hours of developmental/remedial work
154	2.19	145	2.09	108.5	1.99	105.5	2.20	48.5	2.14	177.5	2.19	Number or percent of parttime faculty/staff by level of compensation
155	2.20	167.5	2.17	147.5	2.13	268	3.20	222	2.95	154.5	2.11	Number or percent of currently enrolled students by hours completed
156	2.20	68	1.82	182.5	2.27	268	3.20	281.5	3.10	189	2.22	Number or percent of currently enrolled students by academic skills level as measured by state instruments
157	2.20	104	1.96	162	2.19	194.5	2.80	333.5	3.20	209	2.29	Number of library holdings per program FTE
158	2.20	183	2.23	247.5	2.51	358	3.60	260.5	3.05	146	2.09	Number or percent of students transferring with associate degree by GPA per discipline area
159	2.20	214	2.31	247.5	2.51	194.5	2.80	303.5	3.14	126	2.01	Number or percent of students transferring without associate degree by completing a four-year degree

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
160	2.21	184	2.23	256	2.54	194.5	2.80	303.5	3.14	133	2.04	Number or percent of native students by completing a four-year degree
161	2.21	159.5	2.14	157.5	2.18	268	3.20	209	2.90	184	2.21	Number or percent of currently enrolled students by number of hours enrolled
162	2.22	179.5	2.22	164	2.17	268	3.20	175.5	2.81	183	2.20	Number or percent of entering students by number of hours enrolled
163	2.23	88	1.89	182.5	2.27	162.5	2.60	345.5	3.24	170	2.16	Number or percent of currently enrolled students by academic skills level as measured by national instruments
164	2.23	177	2.21	280	2.61	318	3.40	281.5	3.10	134.5	2.14	Number or percent of students transferring with associate degree by upper division entering term GPA categories
165	2.23	199.5	2.26	309	2.75	318	3.40	260.5	3.05	79	1.91	Number or percent of native students by average GPA
166	2.24	216	2.31	264.5	2.56	194.5	2.80	113	2.52	67.5	1.86	Number or percent of entering students by need for various student services
167	2.24	137.5	2.06	218.5	2.40	194.5	2.80	192	2.86	196.5	2.25	Number or percent of program completers by number of hours with failing grade
168	2.24	167.5	2.17	129	2.07	268	3.20	303.5	3.14	170	2.16	Number or percent of currently enrolled students by number of hours repeated
169	2.25	70	1.83	170.5	2.22	130.5	2.40	325	3.19	260.5	2.47	Number or percent of program completers by performance on standardized national tests
170	2.25	224	2.35	137.5	2.11	47	1.80	126.5	2.57	160	2.14	Level of demand for program/service in nation
171	2.25	248.5	2.45	185	2.27	162.5	2.60	139	2.62	123	2.01	Ratings of support services by program leavers
172	2.26	47.5	1.77	186.5	2.28	268	3.20	209	2.90	278.5	2.52	Number or percent of program completers by performance on standardized state tests
173	2.26	209.5	2.29	157.5	2.18	318	3.40	281.5	3.10	139	2.06	Number or percent of currently enrolled students by number of hours incomplete
174	2.26	157.5	2.13	272	2.59	268	3.20	345.5	3.24	152	2.11	Number or percent of students transferring without associate degree by enrollment in a four-year institution
175	2.27	197.5	2.26	283	2.64	318	3.40	260.5	3.05	168	2.16	Number or percent of students transferring without associate degree by upper division cumulative term GPA categories
176	2.27	234	2.39	308	2.74	268	3.20	260.5	3.05	94	1.94	Number or percent of students transferring without associate degree by academic major
177	2.28	261.5	2.50	135	2.08	130.5	2.40	108	2.48	213	2.30	Ratings of a program curriculum by program leavers
178	2.28	159.5	21.4	210.5	2.38	318	3.40	222	2.95	145.5	2.11	Number or percent of currently enrolled students by number of hours withdrawn
179	2.28	175	2.20	279	2.61	358	2.60	303.5	3.14	176	2.19	Number or percent of native students by upper division cumulative term GPA categories
180.5	2.28	186	2.23	154	2.17	27	1.60	175.5	2.81	232	2.37	Number or percent of program completers by type of handicap
180.5	2.28	174	2.19	129	2.07	268	3.20	175.5	2.81	245.5	2.42	Ratings by external consultants
182	2.28	134	2.05	191	2.30	226.5	3.00	303.5	3.14	215	2.31	Number or percent of entering students by performance on standardized national tests

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
183	2.29	203.5	2.28	197.5	2.33	194.5	2.80	281.5	3.10	205.5	2.29	Number or percent of program completers by term GPA categories
184	2.29	244	2.44	177.5	2.24	162.5	2.60	87.5	2.38	196.5	2.25	Ratings of program staff by program leavers
185	2.29	217.5	2.32	234	2.45	394.5	3.80	281.5	3.10	180	2.19	Number or percent of students transferring without associate degree by academic major
186	2.30	203.5	2.28	191	2.30	105.5	2.20	87.5	2.38	199.5	2.26	Number or percent of program completers by time spent in program
187	2.30	152.5	2.12	162	2.19	226.5	3.00	209	2.90	191	2.23	Number or percent of program completers by degree level sought
188	2.30	84.5	1.88	225	2.42	76.5	2.00	222	2.95	230	2.36	Number or percent of program completers by academic skills level as measured by local instruments
189	2.30	112	1.97	197.5	2.33	268	3.20	209	2.90	240	2.41	Number or percent of entering students by performance on standardized state tests
190	2.30	212	2.30	249	2.51	394.5	3.80	260.5	3.05	182	2.20	Number or percent of native students by academic major
191	2.31	244	2.44	278	2.60	358	3.60	238.5	3.00	185	2.21	Number or percent of students transferring without associate degree by GPA per discipline area
192	2.31	219.5	2.33	266	2.56	358	3.60	303.5	3.14	192	2.24	Number or percent of native students by GPA per discipline area
193	2.32	222.5	2.34	292	2.67	318	3.40	281.5	3.10	172.5	2.17	Number or percent of students transferring with associate degree by upper division current term GPA categories
194	2.32	215	2.31	179	2.25	268	3.20	238.5	3.00	247	2.42	Number or percent of program completers by number of hours completed
195	2.31	194	2.25	188.5	2.29	318	3.40	148.5	2.67	199.5	2.26	Number or percent of program leavers by number of hours withdrawn
196	2.32	189	2.24	186.5	2.28	358	3.60	336	3.21	205.5	2.29	Number or percent of program leavers by cumulative GPA categories for program-related course work
197	2.32	201	2.27	285.5	265	268	3.20	345.5	3.24	161	2.14	Number or percent of students transferring with associate degree by number of hours transferred
198	2.32	162.5	2.14	201.5	2.34	105.5	2.20	152	2.70	189	2.22	Cost of needs assessment or other necessary research by program FTE
199	2.32	230	2.37	307	2.74	318	3.40	260.5	3.05	172.5	2.17	Number or percent of students transferring without associate degree by upper division entering GPA categories
200	2.33	189	2.24	175	2.24	130.5	2.40	271.5	3.05	213	2.30	Cost of program evaluation per program FTE
201	2.33	251	2.46	172	2.23	105.5	2.20	113	2.52	221.5	2.33	Number of alternative educational methods offered
202	2.33	124	2.02	197.5	2.33	358	3.60	363.5	3.29	236.5	2.39	Number or percent of currently enrolled students by performance on standardized national tests
203	2.34	232.5	2.38	225	2.42	318	3.40	325	3.19	157	2.13	Number or percent of program leavers by cumulative GPA categories
204	2.34	209.5	2.29	188.5	2.29	162.5	2.60	126.5	2.57	221.5	2.33	Number or percent of entering students by amount of time since last formal educational experience
205	2.34	165.5	2.15	221.5	2.41	268	3.20	222	2.95	252.5	2.41	Number or percent of program leavers by number of hours of developmental/remedial work
206	2.34	217.5	2.32	294	2.68	268	3.20	345.5	3.24	158	2.13	Number or percent of students transferring without associate degree by number of hours transferred

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
207	2.34	192	2.25	150	2.14	194.5	2.80	192	2.86	223.5	2.33	Number or percent of currently enrolled students by level of previous academic achievement
208	2.34	265	2.52	290	2.66	194.5	2.80	175.5	2.81	59	1.83	Number or percent of currently enrolled students by use of various student services
209	2.35	181	2.22	200	2.33	130.5	2.40	165	2.76	181	2.20	Cost of needs assessment or other necessary research per program unduplicated headcount
210	2.35	219.5	2.33	169	2.21	130.5	2.40	209	2.90	208	2.29	Cost of program evaluation
211	2.35	209.5	2.29	166.5	2.20	162.5	2.60	139	2.62	263.5	2.48	Number or percent of program leavers by type of handicap
212	2.35	179.5	2.22	125.5	2.06	394.5	3.80	260.5	3.05	218.5	2.32	Number or percent of program leavers by major area of study
213	2.35	101	1.94	218.5	2.40	394.5	3.80	260.5	3.05	268	2.49	Number or percent of currently enrolled students by performance on standardized state tests
214	2.36	106	1.95	237.5	2.47	194.5	2.80	238.5	3.00	250	2.43	Number or percent of program completers by academic skills level as measured by state instruments
215	2.36	237	2.40	117	2.02	318	3.40	175.5	2.81	283	2.53	Number or percent of entering students by number of years of related work
216	2.36	287.5	2.61	160	2.18	226.5	3.00	99.5	2.43	248.5	2.43	Ratings of program instructional strategies by program leavers
217	2.36	305	2.68	114.5	2.01	424	4.00	175.5	2.81	213	2.30	Number or percent of program leavers holding jobs for which traimd
218	2.36	206	2.28	305	2.73	318	3.40	303.5	3.14	198	2.25	Number or percent of native students by upper division entering term GPA categories
219	2.37	122	2.02	228	2.43	105.5	2.20	325	3.19	239	2.40	Number or percent of program completers by academic skills level as measured by national instruments
220	2.37	226	2.35	204	2.35	194.5	2.80	139	2.62	218.5	2.32	Number or percent of program leavers by time spent in program
221	2.37	189	2.24	228	2.43	424	4.00	99.5	2.43	251	2.43	Job satisfaction ratings by non-completers
222	2.38	260	2.49	166.5	2.20	318	3.40	303.5	3.14	203.5	2.28	Number or percent of entering students by part time/full time classification
223	2.38	254.5	2.48	180	2.26	268	3.20	157	2.71	189	2.22	Number or percent of program leavers by career decision status
224	2.38	191	2.24	285.5	2.65	358	3.60	385	3.38	194	2.24	Number or percent of students transferring with associate degree by type of college or university entered
225	2.38	165.5	2.15	274.5	2.59	162.5	2.60	260.5	3.05	273.5	2.51	Number or percent of program completers by number of hours of developmental/remedial work
226	2.39	257	2.48	314	2.77	318	3.40	260.5	3.05	195	2.25	Number or percent of students transferrring without associate degree by upper division current term GPA categories
227	2.39	133	2.05	218.5	2.40	162.5	2.60	325	3.19	260.5	2.47	Number or percent of program leavers by academic skills level as measured by local instruments
228	2.40	226	2.35	175	2.24	318	3.40	192	2.86	259	2.47	Number or percent of program leavers by number of hours completed
229	2.40	221	2.33	151	2.15	130.5	2.40	199.5	2.89	220	2.33	Number or percent of fulltime faculty/staff by level of participation in professional organizations
230	2.40	259	2.48	182.5	2.27	318	3.40	192	2.86	203.5	2.28	Number or percent of entering students by number of hours with failing grade

APPENDIX E (continued)

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
231	2.40	203.5	2.28	177.5	2.24	226.5	3.00	148.5	2.67	310	2.63	Number or percent of program completers by number of jobs held since leaving program
232	2.40	231	2.38	302	2.72	358	3.60	303.5	3.14	216	2.32	Number or percent of native students by upper division current term GPA categories
233	2.40	254.5	2.48	175	2.24	318	3.40	281.5	3.10	211	2.30	Number or percent of currently enrolled students by parttime/ fulltime classification
234	2.41	241.5	2.43	208	2.37	318	3.40	209	2.90	248.5	2.43	Number or percent of program leavers by number of hours incomplete
235	2.41	199.5	2.26	284	2.65	358	3.60	325	3.19	202	2.28	Number or percent of native students by enrollment in a four-year institution
236	2.42	203.5	2.28	235.5	2.46	194.5	2.80	363.5	2.29	278.5	2.52	Number or percent of program completers by number of hours repeated
237	2.42	248.5	2.45	157.5	2.18	358	3.60	316.5	3.16	245.5	2.42	Number or percent of entering students by cumulative GPA categories for program related course work
238	2.42	246	2.44	133	2.07	162.5	2.60	354.5	3.25	244	2.42	Cost of accreditation studies per total program
239	2.42	307	2.68	197.5	2.33	268	3.20	75.5	2.33	265.5	2.49	Ratings of program facilities/equipment by program leavers
240	2.43	156	2.13	206	2.37	47	1.80	238.5	3.00	201	2.27	Number or percent of fulltime faculty/staff by type of language spoken
241	2.43	256	2.48	289	2.66	358	3.60	303.5	3.14	223.5	2.33	Number or percent of students transferring with associate degree by GPA per type of course
242	2.43	229	2.37	232	2.45	318	3.40	345.5	3.24	236.5	2.39	Number or percent of program leavers by term GPA categories
243	2.44	272	2.55	78	1.87	424	4.00	281.5	2.10	287	2.55	Number or percent of program completers by salary categories
244	2.44	169	2.17	270	2.58	162.5	2.60	126.5	2.57	270.5	2.50	Number or percent of program leavers by types of developmental/ remedial assistance desired
245	2.45	177	2.21	210.5	2.38	76.5	2.00	148.5	2.67	217	2.32	Number or percent of parttime faculty/staff by type of language spoken
246	2.46	152.5	2.12	242	2.49	268	3.20	325	3.19	288	2.56	Number or percent of program leavers by academic skills level as measured by state instruments
247	2.47	173	2.19	274.5	2.59	184.5	2.80	260.5	3.05	263.5	2.48	Number or percent of program completers by number of hours withdrawn
248	2.47	290.5	2.62	194	2.31	318	3.40	281.5	3.10	210	2.30	Number or percent of entering students by cumulative GPA categories
249	2.48	237	2.40	228	2.43	358	3.60	363.5	3.29	231	2.36	Number or percent of entering students by type of high school diploma
250	2.48	154.5	2.13	245	2.51	226.5	3.00	325	3.19	307.5	2.62	Number or percent of program leavers by performance on standardized national tests
251	2.48	232.5	2.38	221.5	2.41	194.5	2.80	138	2.62	256	2.46	Number or percent of currently enrolled students by time spent in program
252	2.49	226	2.35	232	2.45	318	3.40	363.5	3.29	289.5	2.56	Number or percent of program leavers by number of hours repeated

APPENDIX E (continued)

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
253	2.49	222.5	2.34	320	2.82	358	3.60	395.5	3.43	225	2.34	Number or percent of students transferring without associate degree by type of college or university entered
254	2.49	140.5	2.08	270	2.58	394.5	3.80	222	2.95	313.5	2.64	Number or percent of program leavers by performance on standardized state tests
255	2.50	287.5	2.61	299	2.70	358	3.60	303.5	3.14	243	2.42	Number or percent of students transferring without associate degree by GPA per type of course
256	2.50	297.5	2.65	332	2.89	194.5	2.80	113	2.52	162	2.14	Number or percent of program leavers by need for various student services
257.5	2.51	266.5	2.52	201.5	2.34	268	3.20	238.5	3.00	276	2.51	Number or percent of entering students by number of hours completed
257.5	2.51	294	2.63	240	2.48	268	3.20	67.5	2.29	307.5	2.62	Number or percent of program leavers by employment status
259	2.51	278.5	2.58	336	2.91	130.5	2.40	192	2.86	150.5	2.10	Number or percent of program completers by need for various student services
260	2.51	268.5	2.52	298	2.69	358	3.60	345.5	3.24	254	2.44	Number or percent of native students by GPA per type of course
261	2.52	290.5	2.62	191	2.30	268	3.20	303.5	3.14	228	2.35	Number or percent of entering students by term GPA categories
262	2.52	171.5	2.18	245	2.51	268	3.20	363.5	3.29	297	2.59	Number or percent of program leavers by academic skills level as measured by national instruments
263	2.52	315	2.69	349	2.95	226.5	3.00	165	2.76	142	2.07	Number or percent of program leavers by use of various student services
264	2.53	290.5	2.62	251	2.52	394.5	3.80	385	3.38	228	2.35	Number or percent of entering students by scholastic honors, awards or memberships earned (scholarships, honorary societies, etc)
265	2.53	241.5	2.43	253.5	2.53	194.5	2.80	281.5	3.10	281	2.53	Number or percent of program completers by number of hours incomplete
266	2.53	278.5	2.58	230	2.44	162.5	2.60	165	2.76	273.5	2.51	Ratings of program administration by program leavers
267	2.53	244	2.44	335	2.90	318	3.40	363.5	3.29	233	2.37	Number or percent of students transferring with associate degree by average course load
268	2.53	273	2.56	264.5	2.56	130.5	2.40	315.5	3.16	207	2.29	Number or percent of fulltime faculty/staff by level of involvement in campus extracurricular activities
269	2.54	263	2.51	154	2.16	358	3.60	192	2.86	338	2.75	Number or percent of currently enrolled students by number of years of related work
270	2.54	250	2.46	331	2.89	318	3.40	345.5	3.24	226	2.35	Number or percent of native students by average course load
271	2.55	235	2.39	313	2.76	358	3.60	385	3.38	241	2.41	Number or percent of native students by type of college or university entered
272	2.55	348	2.84	160.5	2.22	194.5	2.80	75.5	2.33	322.5	2.68	Ratings of a program curriculum by community (general)
273	2.55	240	2.42	213	2.39	130.5	2.40	379.5	3.35	292	2.58	Cost of accreditation studies per program FTE
274	2.55	257	2.48	208	2.37	162.5	2.60	105	2.45	302.5	2.60	Number or percent of parttime faculty/staff by level of participation in college governance
275	2.55	294	2.63	352.5	2.96	47	1.80	209	2.90	235	2.38	Number or percent of program completers by race classification
276	2.56	320	2.71	360.5	3.00	162.5	2.60	260.5	3.05	149	2.09	Number or percent of program completers by use of various student services
277	2.57	281	2.58	223	2.41	394.5	3.80	385	3.38	270.5	2.50	Number or percent of entering students by number of CLEP hours earned

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
278	2.57	237	2.40	237.5	2.47	226.5	3.00	175.5	2.81	336.5	2.74	Number or percent of program leavers by level of previous academic achievement
279	2.57	301	2.66	218.5	2.40	268	3.20	281.5	3.10	276	2.51	Number or percent of entering students by number of hours repeated
280	2.58	171.5	2.18	281	2.61	162.5	2.60	238.5	3.00	326.5	2.69	Number or percent of program completers by level of previous academic achievement
281	2.58	296	2.64	232	2.45	162.5	2.60	152	2.70	265.5	2.49	Number or percent of program leavers by level of awareness of college's programs, services, etc.
282	2.59	344.5	2.80	291	2.66	424	4.00	375.5	3.33	228	2.35	Number or percent of entering students by level of financial assistance desired
283	2.60	322.5	2.72	277	2.60	47	1.80	120	2.55	255	2.44	Number or percent of program completers by level of awareness of college's programs, services, etc.
284.5	2.60	310.5	2.69	360.5	3.00	194.5	2.80	209	2.90	242	2.41	Number or percent of program leavers by race classification
284.5	2.60	274.5	2.57	253.5	2.53	318	3.40	363.5	3.29	256	2.45	Number or percent of program leavers by degree level sought
286	2.60	297.5	2.65	344	2.93	318	3.40	363.5	3.29	234	2.38	Number or percent of students transferring without associate degree by average course load
287	2.61	276.5	2.57	214.5	2.39	162.5	2.60	390	3.40	302.5	2.60	Cost of accreditation studies per program unduplicated headcount
288	2.61	315	2.69	194	2.31	226.5	3.00	99.5	2.43	351	2.83	Ratings of program facilities/equipment by community (general)
289	2.62	335	2.75	166.5	2.20	394.5	3.80	139	2.62	352.5	2.83	Number or percent of currently enrolled students holding jobs for which trained
290	2.62	299	2.66	262	2.55	318	3.40	238.5	3.00	262	2.48	Number or percent of entering students by number of hours withdrawn
291	2.63	324	2.72	318	2.82	268	3.20	209	2.90	174	2.17	Number or percent of entering students by use of various student services
292	2.63	266.5	2.52	270	2.58	105.5	2.20	238.5	3.00	297	2.59	Number or percent of currently enrolled students by test anxiety levels
293	2.64	285.5	2.60	257	2.54	394.5	3.80	395.5	3.43	297	2.59	Number or percent of currently enrolled students by number of CLEP hours earned
294	2.64	261.5	2.50	348	2.95	268	3.20	345.5	3.24	293	2.58	Number or percent of students transferring with associate degree by time taken for completion of a four-year degree
295	2.64	310.5	2.69	250	2.51	358	3.60	209	2.90	343	2.78	Number or percent of program leavers by number of jobs held since leaving program
296	2.64	344.5	2.80	287.5	2.65	268	3.20	157	2.71	316	2.66	Number or percent of currently enrolled students by employment status
297	2.65	239	2.42	367.5	3.03	394.5	3.80	363.5	3.29	391	2.56	Number or percent of students transferring with associate degree by entering graduate school
298.5	2.66	271	2.54	303.5	2.72	268	3.20	281.5	2.10	352.5	2.83	Number or percent of program completers by number of hours enrolled
298.5	2.66	252	2.46	262	2.55	394.5	3.80	222	2.95	360	2.90	Number or percent of program leavers by number of hours enrolled

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
300	2.66	281	2.58	267.5	2.57	105.5	2.20	292	3.10	317.5	2.67	Number or percent of entering students by test anxiety levels
301	2.66	318	2.71	326.5	2.84	130.5	2.40	165	2.76	322.5	2.68	Number or percent of program completers by age classification
302	2.66	355	2.86	363.5	3.02	105.5	2.20	238.5	3.00	267	2.49	Number or percent of entering students by race classification
303	2.66	247	2.45	235.5	2.46	318	3.40	238.5	3.00	371.5	2.95	Number or percent of program completers by number of years of related work
304	2.67	294	2.63	242	2.49	194.5	2.80	192	2.86	326.5	2.69	Number or percent of currently enrolled students by amount of time since last formal educational experience
305	2.67	301	2.66	274.5	2.59	394.5	3.80	414.5	3.57	300	2.60	Number or percent of currently enrolled students by scholastic honors, awards or memberships earned (scholarships, honorary societies, etc.)
306	2.67	342.5	2.78	350.5	2.95	194.5	2.80	108	2.48	286	2.55	Number or percent of entering students by age classification
307	2.67	349.5	2.84	262	2.55	318	3.40	303.5	3.14	270.5	2.50	Number or percent of entering students by number of hours incomplete
308	2.67	352	2.85	297	2.69	318	3.40	99.5	2.43	328	2.69	Number or percent of entering students by employment status
309	2.68	342.5	2.78	258	2.54	145	2.50	216.5	2.95	276	2.51	Number or percent of entering students by self-concept categories
310	2.68	314	2.69	253.5	2.53	268	3.20	157	2.71	349	2.81	Ratings of program staff by community (general)
311	2.68	320	2.71	225	2.42	318	3.40	139	2.62	366	2.92	Ratings of program administration by community (general)
312	2.68	359	2.88	372.5	3.07	105.5	2.20	281.5	3.10	281	2.53	Number or percent of currently enrolled students by race classification
313	2.68	320	2.71	260	2.55	226.5	3.00	182	2.84	285	2.54	Number or percent of fulltime faculty/staff by level of public service
314	2.68	347	2.83	340	2.93	130.5	2.40	192	2.86	289.5	2.56	Number or percent of program completers by sex classification
315	2.69	339	2.77	326.5	2.84	318	3.40	281.5	3.10	258	2.47	Number or percent of entering students by source of financial support
316	2.69	346	2.82	323	2.83	424	4.00	419.5	3.62	252.5	2.44	Number or percent of currently enrolled students by level of financial assistance desired
317	2.70	337	2.76	316	2.79	130.5	2.40	391	3.42	238	2.40	Number or percent of fulltime faculty/staff by level of participation in college governance
318	2.70	315	2.79	358	2.98	268	3.20	345.5	3.24	315	2.65	Number of students transferring without associate degree by time taken for completion of four-year degree
319	2.70	328	2.73	214.5	2.39	162.5	2.60	238.5	3.00	325	2.68	Number or percent of parttime faculty/staff by level of participation in professional organizations
320	2.71	270	2.53	245	2.51	358	3.60	325	3.19	357	2.88	Number or percent of entering students by I.Q. categories
321	2.71	283.5	2.60	354	2.97	394.5	3.80	402.5	3.48	270.5	2.50	Number or percent of students transferring with associate degree by name of university or college in which enrolled
322	2.71	264	2.52	328	2.86	76.5	2.00	209	2.90	344	2.79	Number or percent of program completers by types of developmental or remedial assistance desired
323	2.72	276.5	2.57	357	2.99	268	3.20	363.5	3.29	331	2.71	Number or percent of native students by time taken for completion of four-year degree

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
324	2.72	336	2.75	303.5	2.72	268	3.20	303.5	3.14	339	..76	Number or percent of program completers by part time/full time classification
325	2.72	283.5	2.60	377	3.10	394.5	3.80	363.5	3.29	294.5	2.58	Number or percent of students transferring without associate degree by entering graduate school
326	2.73	355	2.87	363.5	3.02	194.5	2.80	139	2.62	313.5	2.64	Number or percent of currently enrolled students by age classification
327	2.73	339	2.78	267.5	2.57	226.5	3.00	238.5	3.00	300	2.60	Number or percent of currently enrolled students by self-concept categories
328	2.73	268.5	2.52	380	3.11	394.5	3.80	363.5	3.29	311	2.64	Number or percent of native students by entering graduate school
329	2.73	253	2.48	343	2.93	358	3.60	385	3.38	304	2.61	Number or percent of native students by number of hours transferred
330	2.74	374	2.98	242	2.49	394.5	3.80	109	2.48	362	2.90	Number or percent of entering students holding jobs for which trained
331	2.75	285.5	2.60	300	2.71	394.5	3.80	414.5	3.57	355	2.85	Number or percent of program completers by number of CLEP hours earned
332	2.76	310.5	2.69	340	2.93	226.5	3.00	175.5	2.81	334	2.73	Number or percent of entering students by language spoken in home
333	2.76	369.5	2.95	346.5	2.94	194.5	2.80	192	2.86	332.5	2.72	Number or percent of program leavers by age classification
334	2.78	290.5	2.62	287.5	2.65	358	3.60	375.5	3.33	354	2.84	Number or percent of currently enrolled students by type of high school diploma
335	2.79	315	2.69	369	3.04	394.5	3.80	410	3.52	294.5	2.58	Number or percent of students transferring without associate degree by name of university or college in which enrolled
336	2.79	359	2.88	333.5	2.89	318	3.40	381.5	3.10	281	2.53	Number or percent of currently enrolled students by source of financial support
337	2.79	331.5	2.74	295.5	2.68	179	2.75	169	2.80	340.5	2.77	Number or percent of program leavers by self-concept categories
338	2.79	375.5	2.98	208	2.37	424	4.00	395.5	3.43	347	2.80	Number or percent of program leavers by salary categories
339	2.80	274.5	2.57	311.5	2.76	105.5	2.20	292	3.10	360	2.90	Number or percent of program leavers by test anxiety levels
340	2.80	352	2.85	319	2.82	268	3.20	410	3.52	336.5	2.74	Number or percent of program completers by scholastic honors, awards, or memberships earned (scholarships, honorary societies, etc.)
341	2.80	301	2.66	274.5	2.59	424	4.00	260.5	3.05	384.5	3.05	Numbe or percent of program leavers by number of years of related work
342	2.81	326	2.72	295.5	2.68	76.5	2.00	238.5	3.00	332.5	2.72	Number or percent of program completers by self-concept categories
343	2.81	349.5	2.84	325	2.84	226.5	3.00	152	2.70	342	2.77	Ratings of support services by community (general)
344	2.81	333.5	2.74	360.5	3.19	130.5	2.40	336	3.21	284	2.54	Number or percent of fulltime faculty/staff by race classifications
345	2.83	322.5	2.72	252.5	2.53	358	3.60	345.5	3.24	383	3.03	Number or percent of currently enrolled students by I.Q. classification
346	2.84	339	2.77	317	2.80	394.5	3.80	325	3.19	365	2.92	Number or percent of program leavers by part time/full time classification

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
347	2.84	378	3.00	323	2.83	268	3.20	238.5	3.00	317.5	2.66	Ratings of usefulness of student services by community (general)
348.5	2.84	326	2.72	352.5	2.96	226.5	3.00	238.5	3.00	340.5	2.77	Number or percent of currently enrolled students by language spoken in home
348.5	2.84	365	2.92	340	2.93	226.5	3.00	184	2.85	306	2.61	Ratings of accessibility of student services by community (general)
350	2.84	364	2.92	367.5	3.03	358	3.60	402.5	3.48	305	2.61	Number or percent of students transferring with associate degree by number of times changed major
351	2.84	381	2.58	330	2.88	194.5	2.80	165	2.76	363	2.97	Number or percent of program leavers by amount of time since last formal educational experience
352	2.84	330	2.74	376	3.09	226.5	3.00	238.5	3.00	312	2.64	Number or percent of fulltime faculty/staff by level of research activity
353	2.85	366	2.94	345	2.94	226.5	3.00	201.5	2.90	300	2.60	Ratings of ease of use of student services by community (general)
354	2.85	385.5	2.05	372.5	3.07	226.5	3.00	325	3.19	330	2.70	Number or percent of program leavers by sex classification
355	2.85	303	2.67	360.5	3.00	424	4.00	402.5	3.48	309	2.63	Number or percent of native students by name of university or college in which enrolled
356	2.87	333.5	2.74	398	3.23	162.5	2.60	313	3.15	319.5	2.67	Number or percent of parttime faculty/staff by race classification
357	2.87	382.5	3.03	388	3.18	226.5	3.00	222	2.95	319.5	2.67	Number or percent of currently enrolled students by sex classification
358	2.88	387.5	3.06	384.5	3.17	226.5	3.00	192	2.86	324	2.68	Number or percent of entering students by sex classification
359	2.88	361	2.89	365.5	3.02	162.5	2.60	139	2.62	367	2.92	Number or percent of entering students by commuting distance categories
360	2.89	305	2.68	340	2.93	394.5	3.80	325	3.19	371.5	2.95	Number or percent of program leavers by type of high school diploma
361	2.89	380	3.02	381	3.12	358	3.60	402.5	3.48	321	2.67	Number or percent of students transferring without associate degree by number of times changed major
362	2.89	371	2.97	371	3.07	358	3.60	395.5	3.43	329	2.70	Number or percent of native students by number of times changed major
363	2.90	389	3.06	306	2.73	358	3.60	238.5	3.00	286	3.06	Ratings of program instructional strategies by community (general)
364	2.90	331.5	2.74	340	2.93	358	3.60	375.5	3.33	375	2.98	Number or percent of program completers by type of high school diploma
365	2.91	231	2.77	386	3.17	194.5	2.80	315.5	3.16	350	2.81	Number or percent of fulltime faculty/staff by age categories
366	2.91	372.5	2.97	370	3.15	162.5	2.60	157	2.71	369	2.93	Number or percent of currently enrolled students by commuting distance categories
367	2.92	308	2.69	293	2.67	394.5	3.80	363.5	3.29	414	3.26	Number or percent of program leavers by I.Q. categories
368	2.93	310.5	2.69	355.5	2.98	162.5	2.60	260.5	3.05	369	2.93	Number or percent of program completers by amount of time since last formal educational experience
369	2.93	390	3.08	321	2.83	268	3.20	75.5	2.33	345.5	2.80	Number or percent of parttime faculty/staff by level of public service
370	2.93	377	2.98	375	3.08	268	3.20	303.5	3.14	369	2.93	Number or percent of program leavers by source of financial support
371	2.94	368	2.95	401.5	3.27	162.5	2.60	372	3.32	335	2.73	Number or percent of fulltime faculty/staff by sex classification

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
372	2.95	375.5	2.98	355.5	2.98	394.5	3.80	402.5	3.48	375	2.98	Number or percent of program leavers by level of financial assistance desired
373	2.95	357	2.87	378.5	3.11	268	3.20	336	3.21	348	2.80	Number or percent of fulltime faculty/staff by level of publication activity
374	2.95	326	2.72	346.5	2.94	76.5	2.00	354.5	3.25	378	2.99	Number or percent of program completers by commuting distance categories
375	2.96	305	2.68	360.5	3.00	394.5	3.80	419.5	3.62	384.5	3.05	Number or percent of program leavers by number of CLEP hours earned
376	2.97	329	2.73	323	2.83	394.5	3.80	375.5	3.33	398	3.16	Number or percent of program completers by test anxiety levels
377	2.97	355	2.86	337	2.92	394.5	3.80	434	3.81	360	2.90	Number or percent of program leavers by scholastic honors, awards, or memberships earned (scholarships, honorary societies, etc.)
378	2.99	362	2.90	395	3.22	194.5	2.80	238.5	3.00	358	2.89	Number or percent of parttime faculty/staff by age classification
379	2.99	363	2.91	383	3.16	268	3.20	139	2.62	406.5	3.23	Number or percent of program leavers by commuting distance categories
380	3.02	381	3.02	416	3.35	194.5	2.80	325	3.19	356	2.86	Number or percent of parttime faculty/staff by sex classification
381	3.03	398.5	3.13	350.5	2.95	268	3.20	303.5	3.14	380	3.01	Number or percent of entering students by time spent in program
382	3.03	402.5	3.15	310	2.75	424	4.00	345.5	3.24	389	3.10	Number or percent of entering students by personality types
383	3.04	367	2.94	388	3.18	318	3.40	325	3.19	394	3.13	Number or percent of program leavers by language spoken in home
384	3.04	384	3.03	378.5	3.11	226.5	3.00	379.5	3.35	345.5	2.80	Number or percent of parttime faculty/staff by level of involvement in campus extracurricular activities
385	3.05	396.5	3.12	311.5	2.76	424	4.00	345.5	3.24	388	3.09	Number or percent of currently enrolled students by personality types
386	3.06	369.5	2.95	392	3.20	226.5	3.00	345.5	3.24	391	3.10	Number or percent of program completers by language spoken in home
387	3.06	406	3.21	301	2.71	394.5	3.80	325	3.19	391	3.10	Number or percent of currently enrolled students by salary categories
388	3.06	391	3.10	395	3.22	318	3.40	325	3.19	363	2.92	Number or percent of parttime faculty/staff by level of research activity
389	3.06	379	3.02	408.5	3.31	318	3.40	375.5	3.33	377	2.98	Number or percent of entering students by household income classification
390	3.07	359	2.88	408.5	3.31	318	3.40	192	2.86	402	3.19	Number or percent of entering students by educational status of family
391	3.08	387.5	3.06	315	2.78	394.5	3.80	363.5	3.29	404	3.22	Number or percent of program leavers by personality types
392.5	3.09	396.5	3.12	403	3.28	318	3.40	385	3.38	378	3.00	Number or percent of program completers by source of financial support
392.5	3.09	352	2.85	417.5	3.36	394.5	3.80	238.5	3.00	410.5	3.25	Number or percent of program leavers by educational status of family
394	3.10	400	3.14	405.5	3.29	268	3.20	260.5	3.05	406.5	3.23	Number or percent of program completers by commuting distance categories

APPENDIX E (continued)

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
395	3.10	398.5	3.13	395	3.22	226.5	3.00	417	3.60	364	2.92	Number or percent of parttime faculty/staff by level of participation in college governance
396	3.11	393	3.11	410	3.33	268	3.20	410	3.52	401	3.18	Number or percent of program leavers by household income classification
397	3.11	393	3.11	411.5	3.34	268	3.20	402.5	3.48	398	3.16	Number or percent of program completers by household income classification
398	3.11	385.5	3.05	333.5	2.89	424	4.00	345.5	3.24	398	3.16	Number or percent of program completers by citizenship classification
399	3.12	393	3.11	384.5	3.17	424	4.00	410	3.53	381.5	3.02	Number or percent of entering students by level of involvement in high school activities
400	3.12	372.5	2.97	423	3.42	226.5	3.00	260.5	3.05	410.5	3.25	Number or percent of program completers by educational status of family
401	3.13	402.5	3.15	420.5	3.39	318	3.40	395.5	3.43	375	2.98	Number or percent of currently enrolled students by household income classification
402	3.13	395	3.11	393	3.22	318	3.40	423.5	3.67	391	3.10	Number or percent of program completers by level of financial assistance desired
403	3.14	416	3.34	329	2.87	394.5	3.80	363.5	3.29	400	3.18	Number or percent of entering students by salary categories
404	3.15	412.5	3.29	414	3.35	162.5	2.60	363.5	3.29	381.5	3.02	Number or percent of entering students by citizenship classification
405	3.15	382.5	3.03	420.5	3.39	318	3.40	238.5	3.00	404	3.22	Number or percent of currently enrolled students by educational status of family
406	3.18	401	3.15	405.5	3.29	318	3.40	406.5	3.50	387	3.06	Number or percent of parttime faculty/staff by level of publication activity
407	3.23	418	3.35	407	3.30	76.5	2.00	395.5	3.43	412.5	3.26	Number or percent of program completers by citizenship classification
408	3.24	408.5	3.22	411.5	3.34	424	4.00	433	3.76	395	3.14	Number or percent of entering students by military service classification
409	3.24	428.5	3.42	418	3.37	162.5	2.60	395.5	3.43	393	3.12	Number or percent of currently enrolled students by citizenship classification
410	3.26	405	3.20	400	3.27	394.5	3.80	414.5	3.57	416.5	3.30	Number or percent of entering students by parents' occupational categories
411	3.29	415	3.32	414	3.35	424	4.00	429	3.71	396	3.15	Number or percent of currently enrolled students by military service classification
412	3.30	404	3.17	431	3.51	318	3.40	385	3.38	404	3.22	Number or percent of program completers by marital status
413	3.30	408.5	3.22	417.5	3.36	394.5	3.80	414.5	3.57	318	3.33	Number or percent of currently enrolled students by parents' occupational categories
414	3.31	423.5	3.39	388	3.18	394.5	3.80	292	3.10	424.5	3.41	Number or percent of currently enrolled students by level of public service involvement (however measured)

Program Areas												Program Characteristics
All		Advan. & Prof.		Occup.		Develop.		Comm. Instr. Serv.		Stu. Serv.		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
415	3.32	432	3.44	382	3.14	394.5	3.80	238.5	3.00	428.5	3.45	Number or percent of entering students by level of public service involvement (however measured)
416	3.32	414	3.32	365.5	3.02	394.5	3.80	429	3.72	421	3.38	Number or percent of entering students by rate or number of legal violations
417	3.32	411	3.28	422	3.41	424	4.00	423.5	3.67	412.5	3.26	Number or percent of currently enrolled students by level of involvement in high school activities
418	3.33	425	3.40	428	3.48	268	3.20	395.5	3.43	418	3.34	Number or percent of program leavers by citizenship classification
419	3.35	408.5	3.22	432	3.57	394.5	3.80	410	3.52	408.5	3.24	Number or percent of program leavers by marital status
420	3.35	433	3.46	424.5	3.44	424	4.00	429	3.71	416.5	3.30	Number or percent of program completers by military service classification
421	3.35	423.5	3.39	397	3.23	424	4.00	333.5	3.20	427	3.42	Number or percent of program completers by level of public service involvement (however measured)
422	3.35	408.5	3.22	420	3.49	358	3.60	419.5	3.62	430	3.45	Number or percent of program leavers by parents' occupational categories
423	3.35	421	3.38	374	3.07	394.5	3.80	429	3.71	420	3.37	Number or percent of currently enrolled students by rate or number of legal violations
424	3.36	412.5	3.29	428	3.48	394.5	3.80	419.5	3.62	424.5	3.41	Number or percent of program completers by parents' occupational categories
425	3.38	428.5	3.42	424.5	3.44	424	4.00	429	3.71	426	3.41	Number or percent of program leavers by military service classification
426	3.40	426	3.40	399	3.25	358	3.60	385	3.38	431	3.48	Number or percent of currently enrolled students by number of jobs held since leaving program
427	3.40	419.5	3.37	434	3.64	358	3.60	375.5	3.33	408.5	3.24	Number or percent of currently enrolled students by marital status
428	3.41	422	3.38	433	3.59	358	3.60	345.5	3.24	415	3.27	Number or percent of entering students by marital status
429.5	3.41	417	3.35	390.5	3.18	424	4.00	429	3.71	428.5	3.45	Number or percent of program completers by rate or number of legal violations
429.5	3.41	430	3.42	404	3.28	358	3.60	385	3.38	422	3.38	Number or percent of entering students by number of jobs held since leaving program
431	3.40	427	3.41	414	3.35	318	3.40	406.5	3.50	432	3.49	Number or percent of program leavers by public service involvement (however measured)
432	3.41	431	3.43	401.5	3.27	358	3.60	423.5	3.67	423	3.40	Number or percent of program leavers by rate or number of legal violations
433	3.48	434	3.49	428	3.48	424	4.00	429	3.71	433	3.51	Number or percent of program completers by level of involvement in high school activities
434	3.48	419.5	3.37	426	3.45	424	4.00	423.5	3.67	434	3.61	Number or percent of program leavers by level of involvement in high school activities

APPENDIX F

RANKS AND MEANS FOR ALL PROGRAM CHARACTERISTICS FOR ALL RESPONDENTS AND BY ADMINISTRATIVE AREAS

All (N=450)		Administrative Areas (N=450)												Program Characteristics
		Gen. Admin. (N=102)		Academic Affairs (N=210)		Student Affairs (N=88)		Comm. Instr. Serv. (N=21)		Business Affairs (N=29)		Presidents (N=13)		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
1	1.38	3	1.34	4	1.40	3	1.39	1	1.38	1	1.36	4	1.15	Total cost of program
2	1.42	4	1.36	1	1.35	18	1.55	7	1.62	9	1.63	7	1.23	Ratings of program curriculum by program completers
3	1.43	1	1.26	3	1.40	11	1.47	11	1.71	61	2.04	1	1.08	Employer opinion of program completers
4	1.44	7	1.40	2	1.39	4	1.42	13	1.75	23	1.77	40.5	1.50	Number or percent of students completing a program
5	1.45	2	1.29	5	1.44	16	1.53	2	1.43	35	1.86	6	1.17	Clearly stated program objectives
6	1.47	8	1.40	7	1.45	22.5	1.58	8.5	1.67	3	1.43	2	1.08	Cost of instructional personnel per total program
7	1.51	9	1.42	11	1.51	14	1.50	37	2.05	3	1.43	4	1.15	Total cost per program FTE
8	1.51	6	1.38	14.5	1.56	11	1.47	4.5	1.52	18.5	1.75	48	1.54	Level of demand for program/service in service area
9	1.52	13	1.52	8	1.45	15	1.51	64	2.26	6	1.55	64.5	1.62	Number or percent of fulltime faculty/staff by degrees held
10	1.53	21	1.62	6	1.45	17	1.54	3	1.45	26	1.82	77	1.67	Number of students enrolling in a program
11	1.53	12	1.51	10	1.51	7	1.44	16	1.82	53	1.95	94	1.73	Number or percent of students withdrawing from a program
12	1.54	5	1.36	18	1.60	9	1.45	23	1.95	14	1.68	8	1.25	Number or percent of students passing state board or licensure exams
13	1.54	19	1.61	9	1.48	22.5	1.58	11	1.71	5	1.46	25	1.42	Cost of materials per total program
14	1.54	11	1.51	14.5	1.56	8	1.44	4.5	1.52	35	1.86	64.5	1.62	Level of demand for program/service by students
15	1.61	10	1.46	16	1.60	33	1.71	45.5	2.10	8	1.61	4	1.15	Cost of instructional personnel per program FTE
16	1.62	15	1.57	29	1.66	1	1.33	42	2.10	64.5	2.04	33.5	1.46	Ratings of accessibility of student services by current-enrolled students
17	1.62	14	1.54	30	1.66	19	1.56	29.5	2.00	7	1.57	18	1.38	Total cost of program per unduplicated headcount
18	1.67	28	1.67	12	1.53	87	1.93	8.5	1.67	41.5	1.89	10.5	1.31	Ratings of program facilities/equipment by faculty/staff
19	1.67	25	1.66	20	1.61	50	1.79	18.5	1.86	16	1.70	33.5	1.46	Ratings of program facilities/equipment by program completers
20	1.68	20	1.61	42	1.73	2	1.36	42	2.10	105	2.19	33.5	1.46	Ratings of ease of use of student services by currently enrolled students
21	1.68	22	1.63	28	1.66	29	1.69	14.5	1.81	35	1.86	33.5	1.46	Job satisfaction ratings by program completers
22	1.68	26	1.66	17	1.60	38.5	1.71	64	2.26	29.5	1.83	64.5	1.62	Number or percent of fulltime faculty/staff by number of students per term
23	1.68	23.5	1.65	13	1.54	103.5	1.95	6	1.57	72.5	2.07	18	1.38	Ratings of program instructional strategies by faculty/staff
24	1.68	46	1.75	19	1.60	25	1.62	64	2.26	44.5	1.89	176	2.08	Number or percent of fulltime faculty/staff by years taught/service
25	1.69	23.5	1.65	34	1.70	5.5	1.43	80	2.35	94	2.15	64.5	1.62	Ratings of usefulness of student services by currently enrolled students
26	1.69	31	1.67	24	1.64	39	1.74	39	2.05	21	1.76	127.5	1.84	Number or percent of fulltime faculty/staff by average class size

All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		Program Characteristics
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
27	1.69	37	1.71	23	1.64	31	1.70	56.5	2.21	15	1.70	64.5	1.62	Number or percent of fulltime faculty/staff by number of student contact hours per term
28	1.69	34	1.70	38	1.72	24	1.60	18.5	1.86	10.5	1.64	40.5	1.50	Cost of program administration per total program
29	1.71	39	1.73	45	1.75	26	1.64	25.5	1.95	3	1.43	40.5	1.50	Cost of support services per total program
30	1.72	43	1.74	26	1.65	27	1.67	145	2.63	21	1.76	64.5	1.62	Number or percent of fulltime faculty/staff by number of course hours per term
31	1.73	16	1.58	48	1.76	37.5	1.73	33.5	2.15	27.5	1.82	25	1.42	Cost of instructional personnel per program unduplicated headcount
32	1.73	43	1.74	27	1.65	32	1.70	117	2.53	25	1.79	149.5	1.92	Number or percent of fulltime faculty/staff by length of service in program
33	1.73	35	1.70	33	1.69	45.5	1.78	25.5	1.95	29.5	1.83	87.5	1.69	Number or percent of parttime faculty/staff by degrees held
34	1.74	57.5	1.80	31	1.67	36	1.72	48.5	2.14	41.5	1.89	48	1.54	Ratings of program staff by program completers
35	1.75	17	1.60	43	1.74	44	1.78	71	2.30	40	1.86	25	1.42	Number or percent of program completers by type of license, certificate or registration received
36	1.75	28	1.67	64	1.84	5.5	1.43	67.5	2.29	64.5	2.04	48	1.54	Ratings of accessibility of student services by program completers
37	1.75	30	1.67	49	1.76	48.5	1.79	33.5	2.05	10.5	1.64	40.5	1.50	Number of support staff per total program
38	1.76	48	1.75	22	1.63	91.5	1.93	18.5	1.86	82	2.11	64.5	1.62	Ratings of program administration by faculty/staff
39	1.76	32	1.69	58.5	1.81	13	1.48	93.5	2.40	64.5	2.04	18	1.38	Ratings of usefulness of student services by program completers
40	1.76	18	1.61	54	1.79	55.5	1.82	37	2.05	17	1.73	54.5	1.58	Number or percent of program completers taking state board or licensure exams
41	1.76	47	1.75	32	1.68	77.5	1.91	37	2.05	24	1.79	33.5	1.46	Cost of materials per program FTE
42	1.78	45	1.75	25	1.65	99.5	1.94	21.5	1.90	131.5	2.26	87.5	1.69	Ratings of program instructional strategies by program completers
43	1.78	41	1.74	21	1.63	58	1.82	222	2.95	77.5	2.11	87.5	1.69	Ratio of parttime to fulltime faculty/staff
44	1.78	54.5	1.80	41	1.73	48.5	1.79	48.5	2.14	35	1.86	77	1.67	Cost of equipment maintenance per total program
45	1.78	28	1.67	37	1.72	83	1.92	71	2.30	43	1.89	149.5	1.92	Ratings by accreditation agencies
46	1.79	40	1.74	50	1.77	43	1.77	56.5	2.21	39	1.86	127.5	1.85	Number or percent of fulltime faculty/staff by productivity ratio
47	1.79	51.5	1.79	46	1.75	28	1.67	95	2.42	56	1.97	176	2.08	Number or percent of fulltime faculty/staff by rate of faculty/staff turnover
48	1.80	59	1.81	47	1.75	41.5	1.77	42	2.10	35	1.86	77	1.67	Cost of materials per program unduplicated headcount
49	1.80	61	1.81	44	1.75	77.5	1.91	18.5	1.86	21	1.76	127.5	1.85	Number or percent of parttime faculty/staff by average class size
50	1.80	38	1.72	75	1.88	11	1.47	75.5	2.33	94	2.15	33.5	1.46	Ratings of ease of use of student services by program completers
51	1.81	54.5	1.80	36	1.72	63.5	1.86	126.5	2.57	18.5	1.75	117.5	1.83	Equipment utilization per total program

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
52	1.81	33	1.70	35	1.71	144	2.08	14.5	1.81	94	2.15	10.5	1.31	Ratings of a program curriculum by faculty/staff
53	1.82	53	1.79	39.5	1.73	105.5	1.95	25.5	1.95	82	2.11	64.5	1.62	Ratings of support services by faculty/staff
54	1.83	36	1.71	58.5	1.81	105.5	1.95	29.5	2.00	48.5	1.83	127.5	1.85	Ratings by certification boards
55	1.84	49	1.76	56	1.81	47	1.78	87.5	2.38	77.5	2.11	139	1.92	Program admission requirements
56	1.84	84	1.90	39.5	1.73	87	1.93	42	2.10	58	2.00	107	1.77	Number or percent of parttime faculty/staff by number of students per term
57	1.84	43	1.74	53	1.78	71	1.87	75.5	2.33	125.5	2.25	74.5	1.62	Number or percent of program completers holding jobs for which trained
58	1.85	61	1.81	63	1.83	34.5	1.71	117	2.53	67	2.07	241.5	2.31	Number or percent of fulltime faculty/staff by certification/rank
59	1.85	50	1.78	60	1.82	87	1.93	33.5	2.05	54	1.96	127.5	1.85	Ratings of program facilities/equipment by currently enrolled students
60	1.85	74	1.87	74	1.88	20.5	1.58	113	2.52	46	1.93	48	1.54	Ratings of support services by program completers
61	1.86	67.5	1.84	85	1.91	20.5	1.58	87.5	2.38	82	2.11	87.5	1.69	Ratings of support services by currently enrolled students
62	1.87	63.5	1.83	61	1.82	67.5	1.86	87.5	2.38	69.5	2.07	87.5	1.69	Level of demand for program/service in state
63	1.87	61	1.81	81.5	1.90	52	1.80	71	2.30	35	1.86	87.5	1.69	Cost of program administration per program FTE
64	1.88	72	1.86	57	1.81	73	1.89	33.5	2.05	137.5	2.29	107	1.77	Number/types of changes as a result of program evaluation
65	1.89	56.5	1.80	52	1.78	164.5	2.15	21.5	1.90	131.5	2.26	48	1.54	Ratings of program staff by faculty/staff
66	1.89	70	1.85	66.5	1.85	81.5	1.92	59.5	2.24	58	2.00	108	1.77	Ratings of program staff by currently enrolled students
67	1.90	65.5	1.84	51	1.77	109	1.96	161	2.74	120.5	2.24	107	1.77	Number or percent of fulltime faculty/staff by level of use of alternative instructional methods
68.5	1.90	94	1.93	55	1.80	69	1.87	117	2.53	85.5	2.14	176	2.08	Number or percent of fulltime faculty/staff by level of participation in program decision-making
68.5	1.90	65.5	1.84	88	1.92	70	1.87	51	2.14	27.5	1.82	64.5	1.62	Cost of support services per program FTE
70	1.90	97.5	1.95	62	1.82	111.5	1.97	48.5	2.14	44.5	1.90	107	1.77	Number or percent of parttime faculty/staff by number of student contact hours per term
71	1.90	81	1.90	70	1.87	96.5	1.94	29.5	2.00	51.5	1.93	176	2.08	Number or percent of parttime faculty/staff by productivity ratio
72	1.90	85.5	1.91	92	1.95	45.5	1.78	59.5	2.24	12.5	1.68	139	1.92	Cost of space utilized per total program
73	1.90	82.5	1.90	73	1.87	98	1.94	87.5	2.38	12.5	1.68	139	1.92	Space utilization per total program
74	1.91	51.5	1.79	68	1.86	76	1.90	126.5	2.57	100.5	2.18	162.5	2.00	Number or percent of entering students by types of developmental or remedial assistance desired
75	1.92	73	1.87	98	1.98	37.5	1.73	67.5	2.29	48.5	1.93	77	1.67	Cost of support services per program unduplicated headcount
76	1.92	111	1.99	80	1.89	53.5	1.81	67.5	2.29	48.5	1.93	302	2.62	Number or percent of entering students by type of handicap

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
77	1.92	56	1.80	65	1.84	93	1.93	165	2.76	137.5	2.29	64.5	1.62	Number or percent of entering students by academic skills level as measured by local instruments
78	1.94	104.5	1.97	69	1.87	61	1.93	139	2.62	89.5	2.14	241.5	2.31	Number or percent of entering students by major area of study
79	1.94	80	1.89	96	1.96	41.5	1.77	113	2.52	89.5	2.14	77	1.67	Cost of program administration per program unduplicated headcount
80	1.94	89.5	1.92	77	1.89	80	1.92	199.5	2.89	51.5	1.93	107	1.77	Number or percent of fulltime faculty/staff by number of FTE per term
81	1.95	67.5	1.84	66.5	1.85	147.5	2.09	53.5	2.19	181.5	2.41	162.5	2.00	Ratings of program instructional strategies by currently enrolled students
82	1.95	104.5	1.97	71	1.87	57	1.82	148.5	2.67	175	2.39	197.5	2.15	Number or percent of currently enrolled students by major area of study
83	1.96	95	1.93	72	1.87	127	2.01	93.5	2.40	118.5	2.23	98	1.75	Number or percent of program completers by average time taken for completion of a program
84	1.97	103	1.96	76	1.89	99.5	1.94	146	2.65	89.5	2.14	162.5	2.00	Number/types of changes as a result of accreditation studies
85	1.97	107.5	1.99	90	1.94	111.5	1.97	11	1.71	120.5	2.24	197.5	2.15	Number or percent of parttime faculty/staff by years taught/service
86	1.98	78	1.89	79	1.89	119.5	2.00	157	2.71	162.5	2.36	162.5	2.00	Number or percent of currently enrolled students by types of developmental or remedial assistance desired
87	1.98	124	2.01	78	1.89	119.5	2.00	99.5	2.43	96.5	2.17	107	1.77	Number or percent of parttime faculty/staff by number of course hours taught per term
88	1.99	99	1.95	87	1.92	75	1.89	216.5	2.95	74	2.09	139	1.92	Number or percent of currently enrolled students by average GPA of students in program
89	1.99	101.5	1.96	84	1.90	130	2.02	132.5	2.60	100.5	2.18	64.5	1.62	Cost of equipment maintenance per program FTE
90	1.99	110	1.99	93	1.95	132	2.03	29.5	2.00	75	2.10	197.5	2.15	Number or percent of parttime faculty/staff by length of service in a program
91	1.99	76	1.89	95	1.95	107	1.96	110	2.50	144	2.32	186.5	2.08	Number or percent of currently enrolled students by percent of total college FTE in program
92	2.00	89.5	1.92	102.5	1.99	65.5	1.86	175.5	2.81	77.5	2.11	77	1.67	Number or percent of currently enrolled students by number of hours with failing grade
93	2.00	97.5	1.95	101	1.99	65.5	1.86	315.5	3.16	35	1.86	77	1.67	Number or percent of currently enrolled students by cumulative GPA categories for program-related coursework
94	2.00	91.5	1.92	107	2.00	138	2.05	25.5	1.95	116.5	2.22	162.5	2.00	Ratings of a program curriculum by currently enrolled students
95	2.01	69	1.85	110	2.02	124	2.01	120	2.55	58	2.00	64.5	1.62	Number of support staff per program FTE
96	2.01	107.5	1.99	89	1.94	114.5	1.99	157	2.71	111.5	2.21	139	1.92	Equipment utilization per program unduplicated headcount

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
117	2.08	117	2.00	111	2.03	164.5	2.15	132.5	2.60	100.5	2.18	149.5	1.92	Space utilization per program FTE
118	2.09	141	2.05	124.5	2.08	119.5	2.00	126.5	2.57	111.5	2.21	209.5	2.17	Space utilization per program unduplicated headcount
119	2.09	134.5	2.03	117.5	2.05	96.5	1.94	175.5	2.81	223	2.52	149.5	1.92	Ratio of faculty to student support staff
120	2.09	78	1.89	148	2.18	95	1.94	303.5	3.14	31	1.85	54.5	1.58	Number or percent of students transferring with associate degree by completing a four-year degree
121	2.10	132	2.13	109	2.02	141	2.07	260.5	3.05	137.5	2.29	107	1.77	Number or percent of entering students by academic skills level as measured by national instruments
122	2.10	146	2.07	144	2.16	87	1.93	105	2.45	61	2.04	149.5	1.92	Cost of space utilized per program FTE
123	2.10	148	2.07	130	2.10	129	2.02	59.5	2.24	147.5	2.32	162.5	2.00	Cost of needs assessment or other necessary research per total program
124	2.10	170	2.14	120	2.07	74	1.89	238.5	3.00	111.5	2.21	269	2.46	Number or percent of entering students by degree level sought
125	2.11	168	2.13	115	2.05	150.5	2.10	99.5	2.43	125.5	2.25	249.5	2.33	Cost of program evaluation per total program
126	2.11	158.5	2.11	141	2.15	60	1.83	80	2.35	233.5	2.54	176	2.08	Number or percent of entering students by level of awareness of college's programs, services, etc.
127	2.11	117	2.00	167	2.23	51	1.80	87.5	2.38	213	2.48	48	1.54	Ratings of ease of use of student services by program leavers
128	2.12	132	2.03	129	2.10	147.5	2.09	294	3.11	48.5	1.93	117.5	1.83	Number or percent of program completers by cumulative GPA categories for program related course work
129	2.12	151.5	2.08	117.5	2.05	110	1.96	192	2.86	252.5	2.59	197.5	2.15	Ratio of faculty/staff to administrative personnel
130	2.12	134.5	2.03	142.5	2.15	119.5	2.00	53.5	2.19	213	2.48	48	1.54	Ratings of ease of use of student services by faculty/staff
131	2.12	166	2.13	108	2.01	177.5	2.19	201.5	2.80	96.5	2.17	149.5	1.92	Number or percent of parttime faculty/staff by number of FTE per term
132	2.12	71	1.86	157	2.20	108	1.96	345.5	3.24	105	2.19	25	1.42	Number or percent of students transferring with associate degree by enrollment in a four-year institution
133	2.13	146	2.07	131	2.11	144	2.08	175.5	2.81	111.5	2.21	208.5	2.17	Number or percent of program leavers by number of hours with failing grade
134	2.14	143	2.06	121	2.07	159	2.13	271.5	3.05	118.5	2.23	139	1.92	Number or percent of currently enrolled students by average course load for students in program
135	2.14	172	2.14	135	2.12	167	2.15	59.5	2.24	107	2.21	241.5	2.31	Number or percent of parttime faculty/staff by rate of faculty/staff turnover
136.5	2.14	165	2.10	147	2.17	87	1.93	126.5	2.57	201.5	2.46	302	2.62	Number or percent of currently enrolled students by career decision status
136.5	2.15	141	2.05	152	2.19	81.5	1.92	303.5	3.14	89.5	2.14	117.5	1.83	Number or percent of currently enrolled students by self-concept categories
138	2.15	139	2.05	140	2.14	156	2.12	99.5	2.43	187.5	2.43	241.5	2.31	Number or percent of program completers by career decision status

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
139	2.15	162	2.11	160	2.20	37	1.93	126.5	2.57	125.5	2.25	186.5	2.08	Cost of space utilized per program unduplicated headcount
140	2.15	180	2.18	132.5	2.11	113	1.97	238.5	3.00	125.5	2.25	302	2.62	Number or percent of currently enrolled students by degree level sought
141.5	2.15	187.5	2.20	142.5	2.15	103.5	1.95	87.5	2.38	175	2.39	350.5	2.85	Number or percent of entering students by career decision status
141.5	2.15	144	2.07	170	2.25	62	1.84	120	2.55	181.5	2.41	64.5	1.62	Ratings of usefulness of student services by program leavers
143	2.16	200	2.24	100	1.99	153	2.11	184	2.85	310.5	2.79	222	2.23	Ratio of faculty/staff to clerical staff
144	2.16	117	2.00	208.5	2.35	30	1.70	139	2.62	181.5	2.41	139	1.92	Number or percent of currently enrolled students by need for various student services.
145	2.16	78	1.89	188	2.29	72	1.88	260.5	3.05	142	2.30	40.5	1.50	Number or percent of students transferring with associate degree by average GPA
146	2.16	85.5	1.91	174	2.26	125	2.01	281.5	3.10	82	2.11	25	1.42	Number or percent of students tranferrring with associate degree by upper division cumulative term GPA categories
147	2.17	160.5	2.11	145	2.17	116.5	2.05	260.5	3.05	69.5	2.07	139	1.92	Number or percent of program completers by cumulative GPA categories
148	2.17	117	2.00	161	2.21	134.5	2.04	238.5	3.00	131.5	2.26	98	1.75	Number or percent of students transferring with associate degree by academic major
149	2.17	63.5	1.83	173	2.26	183	2.24	53.5	2.19	233.5	2.54	33.5	1.46	Employer opinion of program non-completers
150	2.17	185.5	2.19	154	2.19	87	1.93	105	2.45	247	2.57	232	2.25	Number or percent of currently enrolled students by level of awareness of college's programs, services, etc.
151	2.18	180	2.18	134	2.12	187	2.22	75.5	2.33	168.5	2.37	162.5	2.00	Ratings of program administration by currently enrolled students
152	2.18	151.5	2.08	137	2.12	164.5	2.15	281.5	3.10	175	2.39	117.5	1.83	Number of library holdings per program unduplicated headcount
153	2.18	146	2.07	138	2.13	179	2.19	192	2.86	201.5	2.46	77	1.67	Number or percent of entering students by number of hours of developmental/remedial work
154	2.19	219.5	2.29	139	2.13	177.5	2.19	48.5	2.14	143	2.31	176	2.08	Number or percent of parttime faculty/staff by level of compensation
155	2.20	172	2.14	149.5	2.18	145.5	2.11	222	2.95	100.5	2.18	232	2.25	Number or percent of currently enrolled students by hours completed
156	2.20	182	2.18	127	2.09	189	2.22	281.5	3.10	147.5	2.32	117.5	1.83	Number or percent of currently enrolled students by academic skills level as measured by state instruments
157	2.20	160.5	2.11	123	2.08	209	2.29	333.5	3.20	201.5	2.46	87.5	1.69	Number of library holdings per program FTE
158	2.20	75	1.88	191	2.30	146	2.09	260.5	3.05	154.5	2.33	14	1.33	Number or percent of students transferring with associate degree by GPA per discipline area

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
159	2.20	100	1.96	200	2.32	126	2.01	303.5	3.14	72.5	2.07	54.5	1.58	Number or percent of students transferring without associate degree by completing a four-year degree
160	2.21	129	2.02	190	2.30	133	2.04	303.5	3.14	64.5	2.04	64.5	1.62	Number or percent of native students by completing a four-year degree
161	2.21	172	2.14	158.5	2.20	184	2.21	209	2.90	69.5	2.07	209.5	2.17	Number or percent of currently enrolled students by number or hours enrolled
162	2.22	158.5	2.11	165	2.23	183	2.20	175.5	2.81	100.5	2.18	176	2.08	Number or percent of entering students by number of hours enrolled
163	2.23	206	2.26	132.5	2.11	170	2.16	345.5	3.24	175	2.39	139	1.92	Number or percent of currently enrolled students by academic skills level as measured by national instruments
164	2.23	88	1.92	214	2.36	134.5	2.04	281.5	3.10	154.5	2.33	14	1.33	Number or percent of students transferring with associate degree by upper division entering term GPA categories
165	2.23	107.5	1.99	224	2.38	79	1.91	260.5	3.05	181.5	2.41	33.5	1.46	Number or percent of native students by average GPA
166	2.24	165	2.12	227	2.39	67.5	1.86	113	2.52	213	2.48	197.5	2.15	Number or percent of entering students by need for various student services
167	2.24	177	2.16	165	2.23	196.5	2.26	192	2.86	77.5	2.11	162.5	2.00	Number or percent of program completers by number of hours with failing grade
168	2.24	195.5	2.21	155	2.19	160	2.16	303.5	3.14	137.5	2.29	186.5	2.08	Number or percent of currently enrolled students by number of hours repeated
169	2.25	168	2.13	126	2.98	260.5	2.47	325	3.19	201.5	2.46	98	1.75	Number or percent of program completers by performance on standardized national tests
170	2.25	236	2.31	162	2.21	160	2.14	126.5	2.57	162.5	2.36	162.5	2.00	Level of demand for program/service in nation
171	2.25	187.5	2.20	186.5	2.31	123	2.01	139	2.62	193	2.44	107	1.77	Ratings of support services by program leavers
172	2.26	175.5	2.15	128	2.09	278.5	2.52	209	2.90	258.5	2.61	117.5	1.83	Number or percent of program completers by performance on standardized state tests
173	2.26	189.5	2.20	171	2.25	139	2.06	281.5	3.10	233.5	2.53	117.5	1.83	Number or percent of currently enrolled students by number of hours incomplete
174	2.26	117	2.00	213	2.36	152	2.11	345.5	3.24	116.5	2.22	25	1.42	Number or percent of students transferring without associate degree by enrollment in a four-year institution
175	2.27	126	2.01	218	2.37	168	2.16	260.5	3.05	105	2.19	25	1.42	Number or percent of students transferring without associate degree by upper division cumulative term GPA categories
176	2.27	130	2.02	242.5	2.44	94	1.94	260.5	3.05	168.5	2.37	98	1.75	Number or percent of students transferring without associate degree by academic major
177	2.28	180	2.18	176	2.27	213	2.30	108	2.48	213	2.48	64.5	1.62	Ratings of a program curriculum by program leavers
178	2.28	175.5	2.15	196.5	2.31	154.5	2.11	222	2.95	201.5	2.46	139	1.92	Number or percent of currently enrolled students by number of hours withdrawn

APPENDIX F (continued)

All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		Program Characteristics
				Administrative Areas										
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
179	2.28	141	2.05	206	2.34	176	2.19	303.5	3.14	154.5	2.33	18	1.38	Number or percent of native students by upper division cumulative term GPA categories
180.5	2.28	208	2.26	158.5	2.20	232	2.37	175.5	2.81	125.5	2.25	396.5	3.15	Number or percent of program completers by type of handicap
180.5	2.28	178	2.17	153	2.19	245.5	2.42	175.5	2.81	233.5	2.54	162.5	2.00	Ratings by external consultants
182	2.28	213	2.27	151	2.18	215	2.31	303.5	3.14	137.5	2.29	162.5	2.00	Number or percent of entering students by performance on standardized national tests
183	2.29	183.5	2.18	181	2.28	205.5	2.29	281.5	3.10	111.5	2.21	186.5	2.08	Number or percent of program completers by term GPA categories
184	2.29	201	2.25	195	2.31	196.5	2.25	87.5	2.38	181.5	2.41	127.5	1.85	Ratings of program staff by program leavers
185	2.29	153	2.08	210	2.35	180	2.19	281.5	3.10	154.5	2.33	139	1.92	Number or percent of students transferring without associate degree by academic major
186	2.30	207	2.26	183.5	2.28	199.5	2.26	87.5	2.38	247	2.57	263.5	2.45	Number or percent of program completers by time spent in program
187	2.30	198	2.22	181	2.28	191	2.23	209	2.90	233.5	2.54	269	2.46	Number or percent of program completers by degree level sought
188	2.30	197	2.21	146	2.17	230	2.36	222	2.95	347	2.93	232	2.25	Number or percent of program completers by academic skills level as measured by local instruments
189	2.30	217.5	2.28	156	2.19	240	2.41	209	2.90	175	2.39	186.5	2.08	Number or percent of entering students by performance on standardized state tests
190	2.30	156.5	2.10	216	2.36	182	2.20	260.5	3.05	168.5	2.37	87.5	1.69	Number or percent of native students by academic major
191	2.31	96	1.94	242.5	2.44	185	2.21	238.5	3.00	193	2.44	25	1.42	Number or percent of students transferring without associate degree by GPA per discipline area
192	2.31	125	2.01	219	2.37	192	2.24	303.5	3.14	226	2.52	10.5	1.31	Number or percent of native students by GPA per discipline area
193	2.32	138	2.04	234	2.43	172.5	2.17	281.5	3.10	181.5	2.41	25	1.42	Number or percent of students transferring with associate degree by upper division current term GPA categories
194	2.32	185.5	2.19	175	2.26	247	2.42	238.5	3.00	162.5	2.36	259	2.42	Number or percent of program completers by number of hours completed
195	2.32	241.5	2.33	177.5	2.27	199.5	2.26	148.5	2.67	233.5	2.54	232	2.25	Number or percent of program leavers by number of hours withdrawn
196	2.32	202.5	2.25	198	2.31	205.5	2129	336	3.21	89.5	2.14	209.5	2.17	Number or percent of program leavers by cumulative GPA categories for program-related course work
197	2.32	163.5	2.11	231	2.42	161	2.14	345.5	3.24	131.5	2.26	98	1.75	Number or percent of students transferring with associate degree by number of hours transferred
198	2.32	230	2.31	192	2.31	189	2.22	152	2.70	247	2.57	197.5	2.15	Cost of needs assessment or other necessary research by program FTE

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
199	2.32	117	2.00	252	2.47	172.5	2.17	260.5	3.05	154.5	2.33	14	1.33	Number or percent of students transferring without associate degree by upper division entering GPA categories
200	2.33	210	2.27	179	2.28	213	2.30	271.5	3.05	220.5	2.50	222	2.23	Cost of program evaluation per program FTE
201	2.33	215.5	2.27	183.5	2.28	221.5	2.33	113	2.52	310.5	2.79	241.5	2.31	Number of alternative educational methods offered
202	2.33	233	2.31	163	2.23	236.5	2.39	363.5	3.29	147.5	2.32	162.5	2.00	Number or percent of currently enrolled students by performance on standardized national tests
203	2.34	218.5	2.29	220	2.37	157	2.13	325	3.19	125.5	2.25	209.5	2.17	Number or percent of program leavers by cumulative GPA categories
204	2.34	215.5	2.27	205	2.33	221.5	2.33	126.5	2.57	187.5	2.43	302	2.62	Number or percent of entering students by amount of time since last formal educational experience
205	2.34	202.5	2.25	185.5	2.29	252.5	2.44	222	2.95	137.5	2.29	232	2.25	Number or percent of program leavers by number of hours of developmental/remedial work
206	2.34	163.5	2.11	245	2.44	158	2.13	345.5	3.24	154.5	2.33	117.5	1.83	Number or percent of students transferring without associate degree by number of hours transferred
207	2.34	213	2.27	185.5	2.29	223.5	2.33	192	2.86	258.5	2.61	193	2.09	Number or percent of currently enrolled students by level of previous academic achievement
208	2.34	189.5	2.20	269	2.55	59	1.83	175.5	2.81	264.5	2.63	186.5	2.08	Number or percent of currently enrolled students by use of various student services
209	2.35	221.5	2.29	211	2.35	181	2.20	165	2.76	268.5	2.64	186.5	2.08	Cost of needs assessment or other necessary research per program unduplicated headcount
210	2.35	225.5	2.30	194	2.31	208	2.29	209	2.90	247	2.57	249.5	2.33	Cost of program evaluation
211	2.35	249	2.36	181	2.28	263.5	2.48	139	2.62	125.5	2.25	365	2.92	Number or percent of program leavers by type of handicap
212	2.35	252	2.37	177.5	2.27	218.5	2.32	260.5	3.05	187.5	2.43	336	2.77	Number or percent of program leavers by major area of study
213	2.35	225.5	2.30	168	2.24	268	2.49	260.5	3.05	201.5	2.46	186.5	2.08	Number or percent of currently enrolled students by performance on standardized state tests
214	2.36	217.5	2.28	165	2.23	250	2.43	238.5	3.00	331.5	2.86	209.5	2.17	Number or percent of program completers by academic skills level as measured by state instruments
215	2.36	193.5	2.21	189	2.30	283	2.53	175.5	2.81	187.5	2.43	286.5	2.54	Number or percent of entering students by number of years of related work
216	2.36	193.5	2.21	199	2.32	248.5	2.43	99.5	2.43	354	2.96	127.5	1.85	Ratings of program instructional strategies by program leavers
217	2.36	210	2.27	212	2.35	213	2.30	175.5	2.81	247	2.57	107	1.77	Number or percent of program leavers holding jobs for which trained
218	2.36	156.5	2.10	244	2.44	198	2.25	303.5	3.14	213	2.48	10.5	1.31	Number or percent of native students by upper division entering term GPA categories

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
219	2.37	233	2.31	169	2.24	239	2.40	325	3.19	299.5	2.75	209.5	2.17	Number or percent of program completers by academic skills level as measured by national instruments
220	2.37	228	2.31	217	2.37	218.5	2.32	139	2.62	233.5	2.54	310	2.64	Number or percent of program leavers by time spent in program
221	2.37	204.5	2.25	222	2.38	251	2.43	99.5	2.43	201.5	2.46	108	1.78	Job satisfaction ratings by non-completers
222	2.38	258	2.40	201	2.33	203.5	2.28	303.5	3.14	201.5	2.46	286.5	2.54	Number or percent of entering students by part time/ full time classification
223	2.38	239.5	2.32	228.5	2.40	189	2.22	157	2.71	277.5	2.68	269	2.46	Number or percent of program leavers by career decision status
224	2.38	191.5	2.20	240	2.43	194	2.24	385	3.28	154.5	2.33	162.5	2.00	Number or percent of students transferring with associate degree by type of college or university entered
225	2.38	195.5	2.21	203	2.33	273.5	2.51	260.5	3.05	233.5	2.54	232	2.25	Number or percent of program completers by number of hours of developmental/remedial work
226	2.39	149	2.07	261	2.53	195	2.25	260.5	3.05	193	2.44	40.5	1.50	Number or percent of students transferring without associate degree by upper division current term GPA categories
227	2.39	213	2.27	193	2.31	260.5	2.47	325	3.19	258.5	2.61	209.5	2.17	Number or percent of program leavers by academic skills level as measured by local instruments
228	2.40	237.5	2.32	204	2.33	259	2.47	192	2.86	247	2.57	316	2.67	Number or percent of program leavers by number of hours completed
229	2.40	259.5	2.41	202	2.33	220	2.33	199.5	2.89	292.5	2.72	336	2.77	Number or percent of fulltime faculty/staff by level of participation in professional organizations
230	2.40	237.5	2132	235	2.42	203.5	2.28	192	2.86	220.5	2.50	186.5	2.08	Number or percent of entering students by number of hours with failing grade
231	2.40	230	2.31	187	2.29	310	2.63	148.5	2.67	268.5	2.64	222	2.23	Number or percent of program completers by number of jobs held since leaving program
232	2.40	168	2.13	253	2.48	216	2.32	303.5	3.14	241	2.56	18	1.38	Number or percent of native students by upper division current term GPA categories
233	2.40	273	2.46	207	2.34	211	2.30	281.5	3.10	201.5	2.46	325	2.69	Number or percent of currently enrolled students by part time/ full time classification
234	2.41	225.5	2.30	223	2.38	248.5	2.43	209	2.90	241	2.56	209.5	2.17	Number or percent of program leavers by number of hours incomplete
235	2.41	199	2.23	250	2.47	202	2.28	325	3.19	193	2.44	149.5	1.92	Number or percent of native students by enrollment in a four-year institution
236	2.42	210	2.27	215	2.36	278.5	2.52	363.5	3.29	175	2.39	139	1.92	Number or percent of program completers by number of hours repeated
237	2.42	246	2.36	229.5	2.40	245.5	2.42	315.5	3.16	111.5	2.21	162.5	2.00	Number or percent of entering students by cumulative GPA categories for program related course work
238	2.42	261.5	2.41	208.5	2.35	244	2.42	354.4	3.25	175	2.39	316	2.67	Cost of accreditation studies per total program

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
239	2.42	243	2.33	246	2.44	265.5	2.49	75.5	2.33	213	2.48	87.5	1.69	Ratings of program facilities/equipment by program leavers
240	2.43	287	2.51	221	2.37	201	2.27	239.5	3.00	239	2.55	325	2.69	Number or percent of fulltime faculty/staff by type of language spoken
241	2.43	183.5	2.18	255	2.49	223.5	2.33	303.5	3.14	264.5	2.63	77	1.67	Number or percent of students transferring with associate degree by GPA per type of course
242	2.43	241.5	2.33	233	2.42	236.5	2.39	345.5	3.24	187.5	2.43	209.5	2.17	Number or percent of program leavers by term GPA categories
243	2.44	272	2.45	172	2.26	287	2.55	281.5	3.10	331.5	2.86	232	2.25	Number or percent of program completers by salary categories
244	2.44	255	2.38	232	2.42	270.5	2.50	126.5	2.57	233.5	2.54	259	2.42	Number or percent of program leavers by types of developmental/remedial assistance desired
245	2.45	293	2.53	236	2.42	217	2.32	148.5	2.67	263	2.62	336	2.77	Number or percent of parttime faculty/staff by type of language spoken
246	2.46	247	2.36	226	2.39	299	2.56	325	3.19	233.5	2.54	209.5	2.17	Number or percent of program leavers by academic skills level as measured by state instruments
247	2.47	264	2.42	225	2.38	263.5	2.48	260.5	3.05	310.5	2.79	277	2.50	Number or percent of program completers by number of hours withdrawn
248	2.47	265.5	2.43	262.5	2.53	210	2.30	281.5	3.10	147.5	2.32	186.5	2.08	Number or percent of entering students by cumulative GPA categories
249	2.48	267	2.43	254	2.48	231	2.36	363.5	3.29	162.5	2.36	222	2.23	Number or percent of entering students by type of high school diploma
250	2.48	261.5	2.41	230	2.41	307.5	2.62	325	3.19	147.5	2.32	186.5	2.08	Number or percent of program leavers by performance on standardized national tests
251	2.48	283	2.49	238.5	2.43	257	2.46	139	2.62	322.5	2.82	375	3.00	Number or percent of currently enrolled students by time spent in program
252	2.49	254	2.38	241	2.43	289.5	2.56	363.5	3.29	220.5	2.50	259	2.42	Number or percent of program leavers by number of hours repeated
253	2.49	223	2.29	271	2.55	225	2.34	395.5	3.43	193	2.44	162.5	2.00	Number or percent of students transferring without associate degree by type of college or university entered
254	2.49	268	2.44	238.5	2.43	313.5	2.64	222	3.95	162.5	2.36	209.5	2.17	Number or percent of program leavers by performance on standardized state tests
255	2.50	191.5	2.20	276	2.57	243	2.42	303.5	3.14	295	2.74	98	1.75	Number or percent of students transferring without associate degree by GPA per type of course
256	2.50	221.5	2.29	314	2.73	162	2.14	113	2.52	295	2.74	186.5	2.08	Number or percent of program leavers by need for various student services
257.5	2.51	259.5	2.41	257	2.51	276	2.51	238.5	3.00	220.5	2.50	259	2.42	Number or percent of entering students by number of hours completed

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
257.5	2.51	249	2.36	262.5	2.53	307.5	2.62	67.5	2.29	298	2.71	254.5	2.38	Number or percent of program leavers by employment status
259	2.51	253	2.37	299	2.68	150.5	2.10	192	2.86	295	2.74	249.5	2.33	Number or percent of program completers by need for various student services
260	2.51	225.5	2.30	266	2.53	254	2.44	345.5	2.34	305.5	2.77	87.5	1.69	Number or percent of native students by GPA per type of course
261	2.52	277.5	2.47	267	2.53	228	2.35	303.5	3.14	258.5	2.61	209.5	2.17	Number or percent of entering students by term GPA categories
262	2.52	281.5	2.49	237	2.43	297	2.59	363.5	3.29	258.5	2.61	232	2.25	Number or percent of program leavers by academic skills level as measured by national instruments
263	2.52	233	2.31	330	2.78	142	2.07	165	2.76	272.5	2.67	249.5	2.33	Number or percent of program leavers by use of various student services
264	2.53	230	2.31	290	2.63	228	2.35	385	3.38	201.5	2.46	197.5	2.15	Number or percent of entering students by scholastic honors, awards or memberships earned (scholarships, honorary societies, etc.)
265	2.53	277.5	2.47	247	2.44	281	2.53	281.5	3.10	347	2.93	209.5	2.17	Number or percent of program completers by number of hours incomplete
266	2.53	274	2.46	259	2.5	273.5	2.51	165	2.76	317	2.81	176	2.08	Ratings of program administration by program leavers
267	2.53	235	2.31	292	2.63	233	2.37	363.5	3.29	213	2.48	209.5	2.17	Number or percent of students transferring with associate degree by average course load
268	2.53	271	2.45	285	2.61	207	2.29	315.5	3.16	252.5	2.59	302	2.62	Number or percent of fulltime faculty/staff by level of involvement in campus extracurricular activities
269	2.54	265.5	2.43	248	2.46	338	2.74	192	2.86	268.5	2.64	316	2.67	Number or percent of currently enrolled students by number of years of related work
270	2.54	251	2.37	291	2.63	226	2.35	345.5	3.24	226	2.52	176	2.08	Number or percent of native students by average course load
271	2.55	281.5	2.49	273	2.56	241	2.41	385	3.38	213	2.48	222	2.23	Number or percent of native students by type of college or university entered
272	2.55	263	2.41	264.5	2.53	322.5	2.68	75.5	2.33	354	2.96	222	2.23	Ratings of a program curriculum by community (general)
273	2.55	289.5	2.52	251	2.47	292	2.58	379.5	3.35	274	2.57	286.5	2.54	Cost of accreditation studies per program FTE
274	2.55	309	2.58	258	2.51	302.5	2.60	105	2.45	282	2.69	286.5	2.54	Number or percent of parttime faculty/staff by level of participation in college governance
275	2.55	204.5	2.25	318	2.73	235	2.38	209	2.90	358.5	2.61	241.5	2.31	Number or percent of program completers by race classification
276	2.56	256	2.39	322	2.76	149	2.09	260.5	3.05	317	2.81	277	2.50	Number or percent of program completers by use of various student services
277	2.57	269.5	2.44	274	2.56	270.5	2.50	385	3.38	268.5	2.64	302	2.62	Number or percent of entering students by number of CLEP hours earned

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
278	2.57	275.5	2.47	256	2.50	336.5	2.74	175.5	2.81	310.5	2.79	316	2.67	Number or percent of program leavers by level of previous academic achievement
279	2.57	275.5	2.47	279	2.59	276	2.51	281.5	3.10	227.5	2.68	209.5	2.17	Number or percent of entering students by number of hours repeated
280	2.58	297	2.55	249	2.47	326.5	2.69	238.5	3.00	310.5	2.79	316	2.67	Number or percent of program completers by level of previous academic achievement
281	2.59	297	2.51	277	2.57	265.5	2.49	152	2.70	394.5	3.11	330.5	2.75	Number or percent of program leavers by level of awareness of college's programs, services, etc.
282	2.59	244.5	2.35	321	2.76	228	2.35	375.5	3.33	201.5	2.46	302	2.62	Number or percent of entering students by level of financial assistance desired
283	2.60	289.5	2.52	288	2.62	255	2.44	120	2.55	403.5	3.14	330.5	2.75	Number or percent of program completers by level of awareness of college's programs, services, etc.
284.5	2.60	239.5	2.32	326.5	2.77	242	2.41	209	2.90	277.5	2.68	254.5	2.38	Number or percent of program leavers by race classification
284.5	2.60	284	2.50	281.5	2.60	256	2.45	363.5	3.29	338	2.89	350.5	2.85	Number or percent of program leavers by degree level sought
286	2.60	257	2.39	315	2.73	234	2.38	363.5	3.29	241	2.56	249.5	2.33	Number or percent of students transferring without associate degree by average course load
287	2.61	302.5	2.57	270	2.55	302.5	2.60	390	3.40	247	2.57	316	2.67	Cost of accreditation studies per program unduplicated headcount
288	2.61	296	2.55	264.5	2.54	351	2.83	99.5	2.43	317	2.91	222	2.23	Ratings of program facilities/equipment by community (general)
289	2.62	315	2.60	260	2.52	352.5	2.83	139	2.62	287	2.71	277	2.50	Number or percent of currently enrolled students holding jobs for which trained
290	2.62	285	2.51	296.5	2.67	262	2.48	238.5	3.00	287	2.71	249.5	2.33	Number or percent of entering students by number of hours withdrawn
291	2.63	312.5	2.59	325	2.76	174	2.17	209	2.90	367	3.00	294	2.58	Number or percent of entering students by use of various student services
292	2.63	314	2.59	284	2.61	297	2.59	238.5	3.00	322.5	2.82	343.5	2.83	Number or percent of currently enrolled students by test anxiety levels
293	2.64	287	2.51	286	2.62	297	2.59	395.5	3.43	299.5	2.75	316	2.67	Number or percent of currently enrolled students by number of CLEP hours earned
294	2.64	291	2.53	298	2.68	293	2.58	345.5	3.24	213	2.48	259	2.42	Number or percent of students transferring with associate degree by time taken for completion of a four-year degree
295	2.64	299	2.56	275	2.57	343	2.78	209	2.90	322.5	2.82	241.5	2.31	Number or percent of program leavers by number of jobs held since leaving program
296	2.64	300.5	2.57	295	2.66	316	2.66	157	2.71	299.5	2.75	269	2.46	Number or percent of currently enrolled students by employment status

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
297	2.65	294	2.54	306	2.70	291	2.56	363.5	3.29	213	2.48	263.5	2.45	Number or percent of students transferring with associate degree by entering graduate school
298.5	2.66	295	2.54	283	2.60	352.5	2.83	281.5	3.10	258.5	2.61	259	2.42	Number or percent of program completers by number of hours enrolled
298.5	2.66	316	2.60	262	2.56	360	2.90	222	2.95	268.5	2.64	316	2.67	Number or percent of program leavers by number of hours enrolled
300	2.66	307	2.58	289	2.63	317.5	2.66	292	3.10	331.5	2.86	350.5	2.85	Number or percent of entering students by test anxiety levels
301	2.66	279	2.48	316	2.73	322.5	2.68	165	2.76	287	2.71	269	2.46	Number or percent of program completers by age classification
302	2.66	249	2.36	339	2.83	267	2.49	238.5	3.00	310.5	2.79	222	2.23	Number or percent of entering students by race classification
303	2.66	304.5	2.57	268	2.55	371.5	2.95	238.5	3.00	287	2.71	375	3.00	Number or percent of program completers by number of years of related work
304	2.67	333	2.69	281.5	2.60	326.5	2.69	192	2.86	331.5	2.86	355	2.91	Number or percent of currently enrolled students by amount of time since last formal educational experience
305	2.67	292	2.53	300	2.68	300	2.60	414.5	3.57	258.5	2.61	232	2.25	Number or percent of currently enrolled students by scholastic honors, awards or memberships earned (scholarships, honorary societies, etc.)
306	2.67	300.5	2.57	329	2.78	286	2.55	108	2.48	310.5	2.79	302	2.62	Number or percent of entering students by age classification
307	2.67	302.5	2.57	311	2.72	270.5	2.50	303.5	3.14	331.5	2.86	277	2.50	Number or percent of entering students by number of hours incomplete
308	2.67	318.5	2.61	307	2.70	328	2.69	99.5	2.43	310.5	2.79	286.5	2.54	Number or percent of entering students by employment status
309	2.68	330	2.67	301	2.68	276	2.51	216.5	2.95	367	3.00	286.5	2.54	Number or percent of entering students by self-concept categories
310	2.68	311	2.59	293	2.64	349	2.81	157	2.71	327	2.85	197.5	2.15	Ratings of program staff by community (general)
311	2.68	318.5	2.61	280	2.60	366	2.92	139	2.62	317	2.81	269	2.46	Ratings of program administration by community (general)
312	2.68	244.5	2.35	346	2.85	281	2.53	281.5	3.10	287	2.71	222	2.23	Number or percent of currently enrolled students by race classification
313	2.68	329	2.66	308	2.70	285	2.54	182	2.84	326	2.83	336	2.77	Number or percent of fulltime faculty/staff by level of public service
314	2.68	269.5	2.44	340.5	2.84	289.5	2.56	192	2.86	268.5	2.64	325	2.69	Number or percent of program completers by sex classification
315	2.69	326	2.64	333	2.79	258	2.47	281.5	3.10	201.5	2.46	325	2.69	Number or percent of entering students by source of financial support

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
316	2.69	280	2.49	342	2.85	252.5	2.44	419.5	3.62	187.5	2.43	358	2.92	Number or percent of currently enrolled students by level of financial assistance desired
317	2.70	312.5	2.59	334	2.80	238	2.40	391	3.42	292.5	2.72	350.5	2.85	Number or percent of fulltime faculty/staff by level of participation in college governance
318	2.70	298	2.56	324	2.76	315	2.65	345.5	3.24	226	2.52	277	2.50	Number of students transferring without associate degree by time taken for completion of four-year degree
319	2.70	352	2.77	287	2.62	325	2.68	238.5	3.00	341.5	2.90	375	3.00	Number or percent of parttime faculty/staff by level of participation in professional organizations
320	2.71	341.5	2.72	278	2.58	357	2.88	325	3.19	277.5	2.68	286.5	2.54	Number or percent of entering students by I.Q. categories
321	2.71	317	2.60	328	2.77	270.5	2.50	402.5	3.48	272.5	2.67	358	2.92	Number or percent of students transferring with associate degree by name of university or college in which enrolled
322	2.71	322	2.68	294	2.64	344	2.79	209	2.90	367	3.00	310	2.64	Number or percent of program completers by types of developmental or remedial assistance desired
323	2.72	322	2.62	312	2.72	331	2.71	363.5	3.29	254	2.59	241.5	2.31	Number or percent of native students by time taken for completion of four-year degree
324	2.72	328	2.66	303	2.69	339	2.76	303.5	3.14	277.5	2.68	375	3.00	Number or percent of program completers by part time/full time classification
325	2.72	310	2.59	338	2.81	394.5	2.58	363.5	3.29	226	2.52	310	2.64	Number or percent of students transferring without associate degree by entering graduate school
326	2.73	307	2.58	343.5	2.85	313.5	2.64	139	2.62	287	2.71	286.5	2.54	Number or percent of currently enrolled students by age classification
327	2.73	346.5	2.74	310	2.71	300	2.60	238.5	3.00	377.5	3.04	294	2.58	Number or percent of currently enrolled students by self-concept categories
328	2.73	324	2.63	332	2.79	311	2.64	363.5	3.29	226	2.52	249.5	2.33	Number or percent of native students by entering graduate school
329	2.73	323	2.62	317	2.73	304	2.61	385	3.38	367	3.00	259	2.42	Number or percent of native students by number of hours transferred
330	2.74	339	2.72	313	2.72	362	2.90	108	2.48	277.5	2.68	350.5	2.85	Number or percent of entering students holding jobs for which trained
331	2.75	304.5	2.57	296.5	2.67	355	2.85	414.5	3.57	358.5	2.96	375	3.00	Number or percent of program completers by number of CLEP hours earned
332	2.76	334.5	2.69	336.5	2.81	334	2.73	175.5	2.81	287	2.71	365	2.92	Number or percent of entering students by language spoken in home
333	2.76	307	2.58	346	2.85	332.5	2.72	192	2.86	322.5	2.82	325	2.69	Number or percent of program leavers by age classification

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
334	2.78	358	2.82	302	2.68	354	2.84	375.5	3.33	299.5	2.75	336	2.77	Number or percent of currently enrolled students by type of high school diploma
335	2.79	327	2.66	351	2.86	294.5	2.58	410	3.52	305.5	2.78	358	2.92	Number or percent of students transferring without associate degree by name of university or college in which enrolled
336	2.79	357	2.81	355	2.89	281	2.53	281.5	3.10	247	2.57	325	2.69	Number or percent of currently enrolled students by source of financial support
337	2.79	346.5	2.74	323	2.76	349.5	2.77	169	2.80	422	3.29	343.5	2.83	Number or percent of program leavers by self concept categories
338	2.79	349	2.76	309	2.71	347	2.80	395.5	3.43	385	3.07	232	2.25	Number or percent of program leavers by salary categories
339	2.80	346.5	2.74	319	2.74	360	2.90	292	3.10	338	2.89	358	2.92	Number or percent of program leavers by test anxiety levels
340	2.80	320	2.61	336.5	2.81	336.5	2.74	410	3.52	403.5	3.14	232	2.25	Number or percent of program completers by scholastic honors, awards, or memberships earned (scholarships, honorary societies, etc.)
341	2.80	346.5	2.74	304	2.69	384.5	3.05	260.5	3.05	347	2.93	389.5	3.08	Number or percent of program leavers by number of years of related work
342	2.81	364.5	2.85	320	2.75	332.5	2.72	238.5	3.00	419	3.21	343.5	2.83	Number or percent of program completers by self-concept categories
343	2.81	337.5	2.70	350	2.86	342	2.77	152	2.70	398	3.11	325	2.69	Ratings of support services by community (general)
344	2.81	325	2.63	367	2.96	284	2.54	336	3.21	341.5	2.90	269	2.46	Number or percent of fulltime faculty/staff by race classification
345	2.83	364.5	2.85	305	2.69	383	3.03	345.5	3.24	299.5	2.75	277	2.50	Number or percent of currently enrolled students by I.Q. classification
346	2.84	355	2.80	326.5	2.77	365	2.92	325	3.19	358.5	2.96	375	3.00	Number or percent of program leavers by part time/ full time classification
347	2.84	344	2.73	360	2.92	317.5	2.66	238.5	3.00	389.5	3.07	302	2.62	Ratings of usefulness of student services by community (general)
348.5	2.84	359.5	2.83	340.5	2.84	340.5	2.77	238.5	3.00	338	2.89	383.5	3.08	Number or percent of currently enrolled students by language spoken in home
348.5	2.84	341.5	2.72	365	2.96	306	2.61	184	2.85	389.5	3.07	269	2.46	Ratings of accessibility of student services by community (general)
350	2.84	331	2.67	361	2.92	305	2.61	402.5	3.47	354	2.96	294	2.58	Number or percent of students transferring with associate degree by number of times changed major
351	2.84	354	2.79	335	2.80	373	2.97	165	2.76	347	2.93	389.5	3.08	Number or percent of program leavers by amount of time since last formal educational experience
352	2.84	359.5	2.83	356	2.89	312	2.64	238.5	3.00	351	2.93	383.5	3.08	Number or percent of fulltime faculty/staff by level of research activity.

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
353	2.85	351	2.77	364	2.95	300	2.60	201.5	2.90	417	3.19	286.5	2.54	Ratings of ease of use of student services by community (general)
354	2.85	321	2.62	378	3.00	330	2.70	325	3.19	322.5	2.82	365	2.93	Number or percent of program leavers by sex classification
355	2.85	374	2.92	348	2.85	309	2.63	402.5	3.48	318	2.81	365	2.92	Number or percent of native students by name of university or college in which enrolled
356	2.87	334.5	2.69	376.5	3.00	319.5	2.67	313	3.15	362	2.97	302	2.62	Number or percent of parttime faculty/staff by race classification
357	2.87	337.5	2.70	385	3.06	319.5	2.67	222	2.95	287	2.71	325	2.69	Number or percent of currently enrolled students by sex classification
358	2.88	341.5	2.72	384	3.06	324	2.68	192	2.86	299.5	2.75	325	2.69	Number or percent of entering students by sex classification
359	2.88	372	2.80	352	2.87	367	2.92	139	2.62	377.5	3.04	302	2.62	Number or percent of entering students by commuting distance categories
360	2.89	367	2.86	343.5	2.85	371.5	2.95	325	3.19	322.5	2.92	336	2.77	Number or percent of program leavers by type of high school diploma
361	2.89	336	2.69	380	3.01	321	2.67	402.5	3.48	343.5	2.93	277	2.50	Number or percent of students transferring without associate degree by number of times changed major
362	2.89	353	2.79	368	2.97	329	2.70	395.5	3.43	343.5	2.93	269	2.46	Number or percent of native students by number of times changed major
363	2.89	341.5	2.72	353	2.87	386	3.06	238.5	3.00	416	3.19	286.5	2.54	Ratings of program instructional strategies by community (general)
364	2.90	361	2.83	346	2.85	375	2.98	375.5	3.33	347	2.93	383.5	3.08	Number or percent of program completers by type of high school diploma
365	2.91	350	2.76	371	2.99	350	2.81	315.5	3.16	351	2.93	365	2.92	Number or percent of fulltime faculty/staff by age categories
366	2.91	375.5	2.92	359	2.91	369	2.93	157	2.71	358.5	2.96	302	2.62	Number or percent of currently enrolled students by commuting distance categories
367	2.92	362.5	2.84	331	2.78	414	3.26	363.5	3.29	338	2.89	316	2.67	Number or percent of program leavers by I.Q. categories
368	2.93	373	2.91	358	2.90	369	2.93	260.5	3.05	385	3.07	409	3.25	Number or percent of program completers by amount of time since last formal educational experience
369	2.93	385	2.99	374	3.00	345.5	2.80	75.5	2.33	372.5	3.03	396.5	3.15	Number or percent of parttime faculty/staff by level of public service
370	2.93	368	2.88	366	2.96	369	2.93	303.5	3.14	277.5	2.68	350.5	2.85	Number or percent of program leavers by source of financial support
371	2.94	365	2.86	382	3.05	335	2.73	372	3.32	303.5	2.76	350.5	2.85	Number or percent of fulltime faculty/staff by sex classification

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
372	2.95	362.5	2.84	369	2.98	375	2.98	402.5	3.48	277.5	2.68	343.5	2.83	Number or percent of program leavers by level of financial assistance desired
373	2.95	387	3.00	373	2.99	348	2.80	336	3.21	303.5	2.76	404	3.23	Number or percent of fulltime faculty/staff by level of publication activity
374	2.95	381	2.96	354	2.88	378	2.99	354.5	3.25	411.5	3.18	389.5	3.08	Number or percent of program completers by commuting distance categories
375	2.96	356	2.81	357	2.90	384.5	3.05	419.5	3.62	403.5	3.14	375	3.00	Number or percent of program leavers by number of CLEP hours earned
376	2.97	377	2.93	349	2.85	398	3.16	375.5	3.33	377.5	3.04	358	2.92	Number or percent of program completers by test anxiety levels
377	2.97	369	2.89	362	2.94	360	2.90	434	3.81	385	3.07	343.5	2.83	Number or percent of program leavers by scholastic honors, awards, or memberships earned (scholarships, honorary societies, etc.)
378	2.99	370	2.89	387	3.07	358	2.89	238.5	3.00	372.5	3.03	383.5	3.08	Number or percent of parttime faculty/staff by age classification
379	2.99	378	2.93	363	2.94	406.5	3.23	139	2.62	394.5	3.11	336	2.77	Number or percent of program leavers by commuting distance categories
380	3.02	379	2.94	395	3.12	356	2.86	325	3.19	351	2.93	365	2.92	Number or percent of parttime faculty/staff by sex classifications
381	3.03	394.5	3.04	375.5	3.00	380	3.01	303.5	3.14	411.5	3.18	375	3.00	Number or percent of entering students by time spent in program
382	3.03	387	3.00	370	2.98	389	3.10	345.5	3.24	411.5	3.18	350.5	2.85	Number or percent of entering students by personality types
383	3.04	371	2.90	388.5	3.07	394	3.13	325	3.19	331.5	2.86	404	3.23	Number or percent of program leavers by language spoken in home
384	3.04	383.5	2.98	396	3.13	345.5	2.80	379.5	3.35	391	3.10	404	3.23	Number or percent of parttime faculty/staff by level of involvement in campus extracurricular activities
385	3.05	391	3.02	379	3.01	388	3.09	345.5	3.24	411.5	3.18	343.5	2.83	Number or percent of currently enrolled students by personality types
386	3.06	387	3.00	388.5	3.07	391	3.10	345.5	3.24	338	2.89	4.3	3.31	Number or percent of program completers by language spoken in home
387	3.06	403	3.10	375	3.00	391	3.10	325	3.19	403.5	3.14	375	3.00	Number or percent of currently enrolled students by salary categories
388	3.06	396	3.04	392	3.11	363	2.92	325	3.19	399.5	3.14	409	3.25	Number or percent of parttime faculty/staff by level of research activity
389	3.06	375.5	2.92	298.5	3.15	377	2.98	375.5	3.33	367	3.00	375	3.00	Number or percent of entering students by household income classification
390	3.07	394.5	3.04	386	3.07	402	3.19	192	2.86	377.5	3.04	396.5	3.15	Number or percent of entering students by educational status of family

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
391	3.08	397.5	3.05	372	2.99	404	3.22	363.5	3.29	422	3.29	389.5	3.08	Number or percent of program leavers by personality types
392.5	3.09	389.5	3.02	400.5	3.16	379	3.00	385	3.38	331.5	2.86	396.5	3.15	Number or percent of program completers by source of financial support
392.5	3.09	397.5	3.05	383	3.05	410.5	3.25	238.5	3.00	377.5	3.04	404	3.23	Number or percent of program leavers by educational status of family
394	3.10	389.5	3.02	390	3.08	406.5	3.23	260.5	3.05	394.5	3.11	365	2.92	Number or percent of program completers by commuting distance categories
395	3.10	392	3.02	402	3.17	364	2.92	417	3.60	399.5	3.14	413	3.31	Number or percent of parttime faculty/staff by level of participation in college governance
396	3.11	380	2.94	394	3.11	401	3.18	410	3.52	394.5	3.11	404	3.23	Number or percent of program leavers by household income classification
397	3.11	382	2.96	398.5	3.15	398	3.16	402.5	3.48	358.5	2.96	396.5	3.15	Number or percent of program completers by household income classification
398	3.11	408	3.15	381	3.03	398	3.16	345.5	3.24	426.5	3.36	389.5	3.08	Number or percent of program completers by citizenship classification
399	3.12	399.5	3.06	400.5	3.16	381.5	3.02	410	3.52	367	3.00	365	2.92	Number or percent of entering students by level of involvement in high school activities
400	3.12	399.5	3.06	393	3.11	410.5	3.25	260.5	3.05	367	3.00	413	3.31	Number or percent of program completers by educational status of family
401	3.13	393	3.04	405	3.23	375	2.98	395.5	3.43	358.5	2.96	383.5	3.08	Number or percent of currently enrolled students by household income classification
402	3.13	402	3.08	397	3.13	391	3.10	423.5	3.67	377.5	3.04	423	3.45	Number or percent of program completers by level of financial assistance desired
403	3.14	404	3.13	391	3.11	400	3.18	363.5	3.29	411.5	3.18	365	2.92	Number or percent of entering students by salary categories
404	3.14	383.5	2.98	407	3.27	381.5	3.02	363.5	3.29	385	3.07	336	2.77	Number or percent of entering students by citizenship classification
405	3.15	406	3.14	403	3.17	404	3.22	238.5	3.00	367	3.00	396.5	3.15	Number or percent of currently enrolled students by educational status of family
406	3.18	409	3.19	404	3.19	387	3.06	406.5	3.50	407	3.17	421	3.42	Number or percent of parttime faculty/staff by level of publication activity
407	3.23	401	3.08	413	3.30	412.5	3.26	395.5	3.43	367	3.00	375	3.00	Number or percent of program completers by citizenship classification
408	3.24	410	3.21	408	3.28	395	3.14	433	3.76	377.5	3.04	418.5	3.38	Number or percent of entering students by military service classification
409	3.24	406	3.14	422	3.36	393	3.12	395.5	3.43	358.5	2.96	336	2.77	Number or percent of currently enrolled students by citizenship classification
410	3.26	411	3.23	406	3.26	416.5	3.30	414.5	3.57	385	3.07	413	3.31	Number or percent of entering students by parents' occupational categories

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
411	3.29	414	3.27	414.5	3.33	396	3.15	429	3.72	394.5	3.11	427.5	3.54	Number or percent of currently enrolled students by military service classification
412	3.30	416.5	3.29	414.5	3.33	404	3.22	395	3.38	419	3.21	396.5	3.15	Number or percent of program completers by marital status
413	3.30	421	3.31	410	3.29	418	3.33	414.5	3.57	385	3.07	404	3.23	Number or percent of currently enrolled students by parents' occupational categories
414	3.31	418	3.30	412	3.30	424.5	3.41	292	3.10	419	3.21	416.5	3.33	Number or percent of currently enrolled students by level of public service involvement (however measured)
415	3.32	422	3.32	411	3.30	428.5	3.45	238.5	3.00	424.5	3.32	413	3.31	Number or percent of entering students by level of public service involvement (however measured)
416	3.32	428	3.38	409	3.29	421	3.38	429	3.71	331.5	2.86	418.5	3.38	Number or percent of entering students by rate or number of legal violations
417	3.32	413	3.27	420	3.36	412.5	3.26	423.5	3.67	411.5	3.18	416.5	3.33	Number or percent of currently enrolled students by level of involvement in high school activities
418	3.33	406	3.14	429	3.41	419	3.34	395.5	3.43	426.5	3.36	383.5	3.08	Number or percent of program leavers by citizenship classification
419	3.35	416.5	3.29	425	3.38	408.5	3.24	410	3.52	432	3.50	424.5	3.46	Number or percent of program leavers by marital status
420	3.35	412	3.25	427.5	3.41	416.5	3.30	429	3.71	411.5	3.18	433.5	3.85	Number or percent of program completers by military service classification
421	3.35	420	3.31	418	3.35	427	3.42	333.5	3.20	428.5	3.43	421	3.42	Number or percent of program completers by level of public service involvement (however measured)
422	3.35	415	3.28	423	3.36	430	3.45	419.5	3.62	377.5	3.04	424.5	3.46	Number or percent of program leavers by parents' occupational categories
423	3.35	426	3.38	416.5	3.34	420	3.37	429	3.71	385	3.07	426	3.50	Number or percent of currently enrolled students by rate or number of legal violations
424	3.36	423	3.32	424	3.37	424.5	3.41	419.5	3.62	403.5	3.14	427.5	3.54	Number or percent of program completers by parents' occupational categories
425	3.38	419	3.30	427.5	3.41	426	3.41	429	3.71	403.5	3.14	433.5	3.85	Number or percent of program leavers by military service classification
426	3.40	429	3.41	416.5	3.34	431	3.48	385	3.38	432	3.50	429	3.55	Number or percent of currently enrolled students by number of jobs held since leaving program
427	3.40	424	3.35	434	3.48	408.5	3.24	375.5	3.33	432	3.50	396.5	3.15	Number or percent of currently enrolled students by marital stauts
428	3.41	427	3.38	432.5	3.47	415	3.27	345.5	3.24	434	3.54	404	3.23	Number or percent of entering students by marital status
429.5	3.41	432	3.48	419	3.35	428.5	3.45	429	3.71	411.5	3.18	421	3.42	Number or percent of program completers by rate or number of legal violations
429.5	3.41	434	3.52	421	3.36	422	3.38	385	3.38	430	3.46	430	3.64	Number or percent of entering students by number of jobs held since leaving program

APPENDIX F (continued)

Administrative Areas														Program Characteristics
All		Gen. Admin.		Academic Affairs		Student Affairs		Comm. Instr. Serv.		Business Affairs		Presidents		
Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	Rank	Mean	
431	3.41	425	3.36	426	3.39	432	3.49	406.5	3.50	428.5	3.43	389.5	3.08	Number or percent of program leavers by public service involvement (however measured)
432	3.41	430	3.45	430	3.41	423	3.40	423.5	3.67	394.5	3.11	409	3.25	Number or percent of program leavers by rate or number of legal violations
433	3.48	431	3.45	423.5	3.47	433	3.51	429	3.71	422	3.29	432	3.75	Number or percent of program completers by level of involvement in high school activities
434	3.48	433	3.50	431	3.43	434	3.62	423.5	3.67	424.5	3.32	431	3.67	Number or percent of program leavers by level of involvement in high school activities

APPENDIX G

PROGRAM CHARACTERISTICS BY CATEGORY FOR ADMINISTRATIVE AREAS

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings for General Administration Area

Rank	Program Characteristics
21	Number of students enrolling in a program
	Number or percent of entering students:
51.5	by types of developmental or remedial assistance desired
56	by academic skills level as measured by local instruments
91.5	by level of previous academic achievement
104.5	by major area of study
	Number or percent of currently enrolled students:
76	by percent of total college FTE in program
78	by types of developmental or remedial assistance desired
89.5	by number of hours with failing grade
97.5	by cumulative GPA categories for program-related coursework
99	by average GPA of students in program
101.5	by number of hours of developmental/remedial work
104.5	by major area of study
107.5	by academic skills level as measured by local instruments
7	Number or percent of students completing a program
	Number or percent of program completers:
5	passing state board or licensure exams
17	by type of license, certificate or registration received
18	taking state board or licensure exams
43	holding jobs for which trained
95	by average time taken for completion of a program
12	Number or percent of students withdrawing from a program
107.5	Number or percent of native students by average GPA
	Number or percent of students transferring:
	with associate degree;
71	by enrollment in a four-year institution
75	by GPA per discipline area
78	by completing a four-year degree
78	by average GPA
85.5	by upper division cumulative term GPA categories
88	by upper division entering GPA categories
	without associate degree;
96	by GPA per discipline area
100	by completing a four-year degree

APPENDIX G (continued)

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings for General Administration Area

Rank	Program Characteristics
41	Ratio of parttime to fulltime faculty/staff
	Number or percent of fulltime faculty/staff:
13	by degrees held
26	by number of students per term
31	by average class size
37	by number of student contact hours per term
40	by productivity ratio
43	by number of course hours taught per term
43	by length of service in program
46	by years taught/service
51.5	by rate of faculty/staff turnover
61	by certification/rank
65.5	by level of use of alternative instructional methods
89.5	by number of FTE per term
94	by level of participation in program decision-making
	Number or percent of parttime faculty/staff:
35	by degrees held
61	by average class size
81	by productivity ratio
84	by number of students per term
97.5	by number of student contact hours per term
107.5	by years taught/service

Program Characteristics Relating to Costs/Resources (Questionnaire Category) III) in the Upper Quartile of Mean Usefulness-Ratings for General Administration Area

Rank	Program Characteristics
	Total cost:
3	per total program
9	per program FTE
14	per program unduplicated headcount
	Cost of administration:
34	per total program
61	per program FTE
80	per program unduplicated headcount
	Cost of instructional personnel:
8	per total program
10	per program FTE
16	per program unduplicated headcount

APPENDIX G (continued)

Rank	Program Characteristics
	Cost of support services:
39	per total program
73	per program unduplicated headcount
94	per program FTE
	Cost of materials:
19	per total program
47	per program FTE
59	per program unduplicated headcount
	Cost of equipment maintenance:
54.5	per total program
101.5	per program FTE
85.5	Cost of space utilized per total program
	Number of support staff:
30	per total program
69	per program FTE
	Equipment utilization:
54.5	per total program
107.5	per program unduplicated headcount
82.5	Space utilization per total program
82.5	Number of library holdings per total program

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings for General Administration Area

Rank	Program Characteristics
1	Employer opinion of program completers
63.5	Employer opinion of program non-completers
2	Clearly stated program objectives
	Level of demand for program/service:
6	in service area
11	by students
63.5	in state
49	Program admission requirements
28	Ratings by accreditation agencies
	Number/types of changes as a result of:
72	program evaluation
103	accreditation studies
36	Ratings by certification boards
22	Job satisfaction ratings by program completers
	Ratings of a program curriculum:
4	by program completers
33	by faculty/staff
91.5	by currently enrolled students

APPENDIX G (continued)

Rank	Program Characteristics
	Ratings of program facilities/equipment:
25	by program completers
28	by faculty/staff
50	by currently enrolled students
	Ratings of program instructional strategies:
23.5	by faculty/staff
45	by program completers
67.5	by currently enrolled students
	Ratings of program staff:
57.5	by program completers
57.5	by faculty/staff
70	by currently enrolled students
48	Ratings of program administration by faculty/staff
	Ratings of support services:
53	by faculty/staff
67.5	by currently enrolled students
74	by program completers
	Ratings of accessibility of student services:
15	by currently enrolled students
28	by program completers
87	by program leavers
	Ratings of ease of use of student services:
20	by currently enrolled students
38	by program completers
	Ratings of usefulness of student services:
23.5	by currently enrolled students
32	by program completers

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings for Presidents

Rank	Program Characteristics
77	Number of students enrolling in a program
	Number or percent of entering students:
64.5	by academic skills level as measured by local instruments
77	by number of hours of developmental/remedial work
87.5	by academic skills level as measured by state instruments
107	by academic skills level as measured by national instruments
	Number or percent of currently enrolled students:
77	by number of hours with failing grade
77	by cumulative GPA categories for program-related coursework
98	by academic skills level as measured by local instruments
40.5	Number or percent of students completing a program

APPENDIX G (continued)

Rank	Program Characteristics
	Number or percent of program completers:
8	passing state board or licensure exams
25	by type of license, certificate or registration received
54.5	taking state board or licensure exams
64.5	holding jobs for which trained
98	by performance on standardized national tests
98	by average time taken for completion of a program
94	Number or percent of students withdrawing from a program
	Number or percent of students transferring:
	with associate degree;
14	by GPA per discipline area
14	by upper division entering term GPA categories
25	by enrollment in a four-year institution
25	by upper division cumulative term GPA categories
25	by upper division current term GPA categories
40.5	by average GPA
54.5	completing a four-year degree
77	by GPA per type of course
98	by academic major
98	by number of hours transferred
	without associate degree;
14	by upper division entering term GPA categories
25	by enrollment in a four-year institution
25	by upper division cumulative term GPA categories
25	by GPA per discipline area
40.5	by upper division current term GPA categories
54.5	completing a four-year degree
98	by average GPA
98	by GPA per type of course
	Number or percent of native students:
10.5	by GPA per discipline area
10.5	by upper division entering term GPA categories
18	by upper division cumulative term GPA categories
18	by upper division current term GPA categories
33.5	by average GPA
64.5	completing a four-year degree
87.5	by academic major
87.5	by GPA per type of course
107	Number or percent of program leavers holding jobs for which trained

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings for Presidents

APPENDIX G (continued)

Rank	Program Characteristics
87.5	Ratio of parttime to fulltime faculty/staff
	Number or percent of fulltime faculty/staff:
64.5	by degrees held
64.5	by number of students per term
64.5	by number of student contact hours per term
64.5	by number of course hours taught per term
107	by level of use of alternative instructional methods
107	by number of FTE per term
	Number or percent of parttime faculty/staff:
87.5	by degrees held
107	by number of students per term
107	by number of student contact hours per term
107	by number of course hours per term

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings for Presidents

Rank	Program Characteristics
	Total cost:
4	per total program
4	per program FTE
18	per program unduplicated headcount
	Cost of administration:
40.5	per total program
77	per program unduplicated headcount
87.5	per program FTE
	Cost of instructional personnel:
2	per total program
4	per program FTE
25	per program unduplicated headcount
	Cost of support services:
40.5	per total program
64.5	per program FTE
77	per program unduplicated headcount
	Cost of materials:
25	per total program
33.5	per program FTE
77	per program unduplicated headcount
	Cost of equipment maintenance:
64.5	per program FTE
77	per total program
	Number of support staff:
40.5	per total program
64.5	per program FTE

APPENDIX G (continued)

Rank	Program Characteristics
	Number of library holdings:
54.5	per total program
87.5	per program FTE

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings for Presidents

Rank	Program Characteristics
1	Employer opinion of program completers
33.5	Employer opinion of program non-completers
6	Clearly stated program objectives
	Level of demand for program/service:
48	in service area
64.5	by students
87.5	in state
107	Number/types of changes as a result of program evaluation
33.5	Job satisfaction ratings by program completers
107	Job satisfaction ratings by program non-completers
	Ratings of a program curriculum:
7	by program completers
10.5	by faculty/staff
64.5	by program leavers
	Ratings of program facilities/equipment:
10.5	by faculty/staff
33.5	by program completers
87.5	by program leavers
	Ratings of program instructional strategies:
18	by faculty/staff
87.5	by program completers
	Ratings of program staff:
48	by program completers
48	by faculty/staff
107	by currently enrolled students
64.5	Ratings of program administration by faculty/staff
	Ratings of support services:
48	by program completers
64.5	by faculty/staff
87.5	by currently enrolled students
107	by program leavers
	Ratings of accessibility of student services:
33.5	by currently enrolled students
48	by program completers
48	by faculty/staff
87.5	by program leavers

APPENDIX G (continued)

Rank	Program Characteristics
	Ratings of ease of use of student services:
33.5	by program completers
33.5	by currently enrolled students
48	by program leavers
48	by faculty/staff
	Ratings of usefulness of student services:
18	by program completers
48	by faculty/staff
64.5	by currently enrolled students
64.5	by program leavers

Program Characteristics Relating to Students (Questionnaire Category I) in the Upper Quartile of Mean Usefulness-Ratings for Business Affairs Area

Rank	Program Characteristics
26	Number of students enrolling in a program
	Number or percent of entering students:
48.5	by type of handicap
89.5	by major area of study
100.5	by number of hours enrolled
100.5	by types of developmental or remedial assistance desired
	Number or percent of currently enrolled students:
35	by cumulative GPA categories for program-related coursework
55	by cumulative GPA categories
61	by type of handicap
69.5	by number of hours enrolled
74	by average GPA of students in program
77.5	by number of hours with failing grade
89.5	by term GPA categories
100.5	by number of hours completed
23	Number or percent of students completing a program
	Number or percent of program completers:
14	passing state board or licensure exams
17	taking state board or licensure exams
40	by type of license, certificate or registration received
48.5	by cumulative GPA categories for program related coursework
69.5	by cumulative GPA categories
77.5	by number of hours with failing grade
100.5	by employment status
53	Number or percent of students withdrawing from a program
	Number or percent of students transferring:
	with associate degree;
31	completing a four-year degree
82	by upper division cumulative GPA categories
105	by enrollment in a four-year institution

APPENDIX G (continued)

Rank	Program Characteristics
	without associate degree;
72.5	completing a four-year degree
105	by upper division cumulative term GPA categories
64.5	Number or percent of native students completing a four-year degree
89.5	Number or percent of program leavers by cumulative GPA categories for program-related coursework

Program Characteristics Relating to Faculty/Staff (Questionnaire Category II) in the Upper Quartile of Mean Usefulness-Ratings for Business Affairs Area

Rank	Program Characteristics
77.5	Ratio of parttime to fulltime faculty/staff
	Number or percent of fulltime faculty/staff:
6	by degrees held
15	by number of student contact hours per term
21	by average class size
21	by number of course hours taught per term
25	by length of service in program
29.5	by number of students per term
39	by productivity ratio
44.5	by years taught/service
51.5	by number of FTE per term
56	by rate of faculty/staff turnover
67	by certification/rank
85.5	by level of participation in program decision-making
85.5	by level of compensation
	Number or percent of parttime faculty/staff:
21	by average class size
29.5	by degrees held
44.5	by number of student contact hours per term
51.5	by productivity ratio
58	by number of students per term
75	by length of service in a program
96.5	by number of course hours taught per term
96.5	by number of FTE per term
107	by rate of faculty/staff turnover

Program Characteristics Relating to Costs/Resources (Questionnaire Category III) in the Upper Quartile of Mean Usefulness-Ratings for Business Affairs Area

APPENDIX G (continued)

Rank	Program Characteristics
	Total cost:
1	per total program
3	per program FTE
7	per program unduplicated headcount
	Cost of administration:
10.5	per total program
35	per program FTE
89.5	per program unduplicated headcount
	Cost of instructional personnel:
3	per total program
8	per program FTE
27.5	per program unduplicated headcount
	Cost of support services:
3	per total program
27.5	per program FTE
48.5	per program unduplicated headcount
	Cost of materials:
5	per total program
24	per program FTE
35	per program unduplicated headcount
	Cost of equipment maintenance:
35	per total program
100.5	per program FTE
	Cost of space utilized:
12.5	per total program
61	per program FTE
	Number of support staff:
10.5	per total program
58	per program FTE
69.5	per program unduplicated headcount
	Equipment utilization:
18.5	per total program
89.5	per program FTE
	Space utilization:
12.5	per total program
100.5	per program FTE

Program Characteristics Relating to General Information (Questionnaire Category IV) in the Upper Quartile of Mean Usefulness-Ratings for Business Affairs Area

Rank	Program Characteristics
61	Employer opinion of program completers
35	Clearly stated program objectives

APPENDIX G (continued)

Ranks	Program Characteristics
	Level of demand for program/service:
18.5	in service area
35	by students
69.5	in state
77.5	Program admission requirements
43	Ratings by accreditation agencies
89.5	Number/types of changes as a result of accreditation studies
48.5	Ratings by certification boards
35	Job satisfaction ratings by program completers
	Ratings of a program curriculum:
9	by program completers
94	by faculty/staff
	Ratings of program facilities/equipment:
16	by program completers
41.5	by faculty/staff
77.5	by currently enrolled students
72.5	Ratings of program instructional strategies by faculty/staff
	Ratings of program staff:
41.5	by program completers
58	by currently enrolled students
	Ratings of program administration:
82	by program completers
82	by faculty/staff
	Ratings of support services:
46	by program completers
82	by faculty/staff
82	by currently enrolled students
	Ratings of accessibility of student services:
64.5	by program completers
64.5	by currently enrolled students
	Ratings of ease of use of student services:
94	by program completers
105	by currently enrolled students
	Ratings of usefulness of student services:
64.5	by program completers
94	by currently enrolled students

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